

The Mining Journal

RAILWAY AND COMMERCIAL GAZETTE.

FORMING A COMPLETE RECORD OF THE PROCEEDINGS OF ALL PUBLIC COMPANIES.

No. 805.—Vol. XXI.]

LONDON, SATURDAY, JANUARY 25, 1851.

[PRICE 6D.]

TO IRON MERCHANTS, MILLWRIGHTS, ENGINEERS, IRONFOUNDERS, MACHINEMAKERS, SMITHS, &c.

MR. EDWARD RAISEBCK begs to announce to his friends and the trade generally, that he has received instructions from Mr. Thos. Dixon, who is retiring from the iron trade, to OFFER FOR UNRESERVED SALE, on Monday, Tuesday, Wednesday, and Thursday, the 3d, 4th, 5th, and 6th days of February, 1851, at his IRON WAREHOUSE, THORNTON-ROAD, BRADFORD, upwards of

FIVE HUNDRED TONS OF BAR, ROD, HOOP, & SHEET IRON, of every description, including shafting of all sizes, up to 6 inches; angle-iron, boiler-plate, &c.; 20 tons of superior spindle steel; 10 tons of single and double shear (L) and cast-steel, in great variety.—Also,

TWO THOUSAND TONS OF PIG-IRON, of first-rate brands, including Yorkshire, Scotch, and Hematite: a large assortment of anvils, bellows, tins, vices, washers, chains, scale-beams, blocks of all sizes, from half-inch and upwards, patent arms and arm moulds, hammers and hammer moulds, share moulds, and every other article connected with the trade; also, 18 sets of contractors' railway wheels and axles, 2 large foundry cranes, capable of lifting 20 tons each, large quantity of foundry models, 1 horizontal press for railway wheels, 1 spoke bending machine, large machine for bending railway tyres, horse, cart, and gears, together with various other articles too numerous to insert.

Sale to commence each day at Ten o'clock.

N.B.—The auctioneer can with confidence recommend the above valuable stock, knowing it has been purchased on the most advantageous terms, and selected from the best markets.—Catalogues may be had six days previous to the sale, on application at the Sun Inn, Bradford; the George Inn, Huddersfield; the Royal Hotel, Dewsbury; or of the Auctioneer, at the Nag's Head Inn, Vicar-lane, Leeds.

Approved bills will be taken, if required, for amounts exceeding £20, adding the usual interest.—THE WAREHOUSE TO BE LET, and the FIXTURES to be taken at a FAIR VALUATION.

TO RAILWAY COMPANIES.—FOR SALE, BY PRIVATE CONTRACT, TWO NEW FIRST-CLASS LOCOMOTIVE ENGINES AND TENDERS, cylinders 15 inches diameter, strokes 20 inches, crank axle, inside cylinders, 18 inches from centre to centre of cylinders, to prevent oscillation; outside malleable iron framing.

TWO PAIRS OF 54 FEET DRIVING WHEELS, coupled.

ONE PAIR OF 4 FEET BEARING WHEELS, in front—BOILER, 10 ft. long in the body.

139 2-inch BRASS TUBES, COPPER FIRE-BOX, AND STAYS.

TENDER, 1000 gallons, with large coke space, on three pairs of 3-feet malleable iron wheels, with double brakes.

We will be glad to treat with any company on liberal terms, and meet their wishes as to mode and manner of payments.—Applications to be addressed to Quarry Field Engine-Works, Gateshead.

JOHN COULTHARD & CO.

EAST EDMONDSLEY COLLIERY.—TO BE SOLD, OR LET, the CURRENT-GOING COLLIERY OF EAST EDMONDSLEY, in the county of DURHAM, containing 174 acres, or thereabouts, held under leases, of which about 30 years are unexpired. The coal has been sold in the markets as "Gibson's Wall's End" and "North Durham Wall's End." The purchaser or lessee will be required to take the engines, &c., at a valuation, which will be of small amount.

For further particulars apply to Mr. William Barkus, viewor, Lowfield, Gateshead.

TO BE SOLD, the LEABROOK WORKS, upon the Birmingham Canal, at TITON, in the county of Stafford, consisting of a FORGE, HOOP, and SHEET MILL, driven by separate engines, of 50 and 30-horse power, with very extensive WAREHOUSES, WHARVES, and all necessary conveniences for carrying on a large trade. The above premises have recently had a considerable sum expended upon them, and are in excellent repair, and present a very favourable opportunity for any party wishing to embark in the Manufacturing of Tin-plates.

For further particulars apply to Mr. George Payton, Handsworth, near Birmingham.

WHEAL BENNY MINE.—TO BE DISPOSED OF, BY PRIVATE CONTRACT, all that valuable MINING SETT, known by the name of WHEAL BENNY, situate in the parish of CALSTOCK, CORNWALL, together with the WATER-WHEEL, LIFTS, ZINC PIPES, and OTHER MATERIALS belonging to and on the mine.

This sett is very extensive, comprises part of the River Tamar, and is contiguous to Lamheroe Wheal Maria, West Wheal Williams, and other promising mines, and is held under a lease from the Duchy of Cornwall for the term of 21 years, from the 1st January, 1846, at the moderate dues of 1-12th.

Upwards of £4000 has been expended by the present adventurers in sinking a shaft and driving adit and other levels, for the purpose of proving the mine, and which, according to the opinion of the agent, is still well worthy of a further trial.

For further particulars apply to the secretary, Mr. James Crofts, No. 4, King-street, Cheapside, London; or to the pursuer, Mr. F. Cleverton, solicitor, 1, Courtney-street, Plymouth.—Dated January 9, 1851.

VALUABLE COAL-FIELDS TO LET, in the WISHAW ESTATE, and county of LANARK, near the junction of the Caledonian and Clydesdale Railways, and within 14 miles of Glasgow.—These COAL-FIELDS, which extend to about 850 acres, will BE LET, for such a term of years as may be agreed upon in ALLOTMENTS, averaging from 70 to 120 imperial acres each, or in larger fields, if adequate offers are made by a single party for more than one lot.

These allotments, which lie contiguous to the different going pits on the same estate, and bordering with the extensive coal and ironstone estates of Coltness, Cleland, Cardin, and Dalziel, and partly proven by the pits and borings on the Wishaw Estate itself, are calculated as consisting of the following SEAMS:—

	Feet.	In.	Average Depth.
Mill Coal	10	0	30 fathoms.
Main and Pyroshaw	7	0	10 "
Solihull	2	0	15 "
Virnie Well	4	0	25 "
Kilnragoe	4	0	20 "
Drumgray	2	6	8 "

Total 30 0 108 fathoms.

These six seams, wherever they have been wrought, are found to be all very excellent workable coal, and the first three are presently worked on this estate, and well-known to be of the best quality; and the other three seams are found and worked in the next adjoining coal-fields of the other surrounding estates, and of excellent quality also; and the whole of these minerals will find ready markets by means of direct railway communication (the Caledonian Railway running through the centre of the estate) in the cities of Edinburgh and Glasgow, and towns of Leith, Perth, Dundee, Paisley, Greenock, Port-Glasgow, and the other towns and harbours on the Forth, Tay, and Clyde; and, in particular, as there are 79 blast-furnaces within 10 miles of the estate, a ready market can also be obtained for them.

The Estate of Wishaw embraces a surface of nearly 2000 acres, and as it marches with several estates (some of them already noticed), where bands of black and rough, or clay-band, ironstones of the best quality are found and wrought, it is believed that the very best black-band ironstone, of at least 1 foot thick, and the best rough or clay-band ironstone, of about 9 inches thick, will be found throughout that part of the Wishaw Estate—the coal of which is now to be let; and in the meantime it may be stated, that bords and searches are now going on to ascertain and confirm the fact; and for these ironstones, either in large or small lots, like the coal, offers for leases will also be received.

To parties wishing to extend or commence the coal or iron trade, the present is a most desirable opening, either as regards the coal or iron trade, or now ones which may be established; and the mines having little or no water to contend with, suitable fittings for the working of the coal and ironstone can be made upon any of these allotments at a very moderate cost.

For particulars apply to Mr. James Miller, factor on the Wishaw Estate, at Wishaw-town, who will show plans and measurements of the areas of the different lots, and also sections of the going coal-works in the same or adjacent estates, and marching with those allotments and divisions now to be let, and furnish any other information.

Wishaw, Dec. 30, 1850.

VALUABLE MINERALS IN AYRSHIRE TO BE LET.—THE COAL, IRONSTONE, LIMESTONE, and FIRE-CLAY in the ESTATE of GROUGAR, containing upwards of 2007 acres Scotch, or thereby, near the town of KILMARNOCK. The COAL has been partially proved by a bore at the dip of the field, and the seams cut are seven in number, as follows:—

No.	Feet.	Inches.	No.	Feet.	Inches.
1	3	5	5	3	0
2	8	5	6	3	0
3	6	0	7	6	0
4	5	0			

Total 32 0 39 feet 9 inches

of coal in a bore 57 fathoms deep.

The lowest seam, which is of very superior quality, is the only one of the above-noted coals that has been worked, and it was only worked in a shallow pit near the outcrop.

The IRONSTONES, which are of excellent quality, and most abundant, are of the clay-band kind. They are grouped, so as to be worked by mining; and a considerable working may also be made open cast, and along with the lime working.

LIMESTONES, &c., similar to those above and below the Black-band Ironstones, worked at Kilbirnie and elsewhere, crop out on this estate, and there is every reason to believe that a large extent of BLACK-BAND IRONSTONE will be found in it, and reasonable time will be allowed to prove by boring, searching, or otherwise.

LIMESTONE abounds in the property in pools, differing in thickness 6 feet and under, and extensive workings could be carried on a long time in these seams at little or no outlay, from the fact of the different seams cropping out on the grounds.

This MINERAL FIELD is now favourably situated as regards railway communication, the Galston and Newmilns Branch being within a mile of it, so that these minerals may be (most profitably) manufactured on the estate, or conveyed by railway to the coast, and into the different iron-works of Ayr and Lanarkshire.

For particulars apply to C. D. Gairdner, or Robert Gairdner, bankers, Kilmarnock, or Alexander and Moore, mining engineers, 24, St. Vincent-place, Glasgow.

December 25, 1850.

MR. JAMES CROFTS, of 4, KING-STREET, CHEAPSIDE, MINING BROKER, in renewing OFFERS of SERVICE to CAPITALISTS, feels much gratified at the extent of patronage and confidence he has received hitherto, and will continue so to treat the interests of his friends in town and country as to deserve a still more important share of their orders, whether for PURCHASING or SELLING MINING SHARES.—MR. CROFTS acts exclusively for PRINCIPALS, and will cheerfully give advice on contemplated investments, so far as his knowledge or judgment permits, either personally or by letter.

Numerous sound concerns may be safely invested in, exclusive of dividend mines, but the latter with a certainty, for some years, of 15 to 20 per cent. per annum interest.

MR. CROFTS HAS SPECIALTY FOR SALE—

Henrick (10 shares)	Lamheroe Wheal Maria (10 shares)
Tinicro (20 shares)	Lewis (10 shares)
South Tamar (20 shares)	Wellington (10 shares)
East Tamar (20 shares)	East Tolgus (5 shares)
Wheal Harris (50 shares)	Wheal Tremar
Wheal Comfort (4 shares)	Wheal Vincent (30 shares)
Nap Down Consols	Wheal Crebor (15 shares)
Warleggan Consols (20 shares)	Holgaston Down (20 shares)
Snowdon (40 shares)	Stray Park (10 shares)
East Hauler (10 shares)	Wheal Elizabeth (1 share)
Wheal Henry (3 shares)	Wheal Lovell (1 share)
North Tolgus (1 share)	

MR. CROFTS issues a PRICE CURRENT of Mining Shares twice each week, which may be had on application.—Dated 4, King-street, Cheapside, Jan. 24, 1851.

MR. JAMES STRIDE, formerly of the firm of Bulmer & Stride, Parliamentary Agents, and late of Spring Gardens, MINING SHARE DEALER and AGENT, begs to state that he now TRANSACTS MINING BUSINESS at the JAMAICA COFFEE-HOUSE, CORNHILL, LONDON.

Considering the improving value of Mining Property, and the consequent increasing demand for Shares, Mr. Stride deems the present time favourable for offering his advice in regard to that description of property.

MR. W. BIRDSEY, MINING AGENT, begs to acquaint his Friends and the Public, that he has OFFICES at No. 1, ST. MICHAEL'S-ALLEY, CORNHILL, and takes this opportunity to thank them for the favours he has hitherto received. From an extensive experience in MINING PROPERTY, in which he has been engaged upwards of 20 years, Mr. Birdsey flatters himself he will be enabled to give much general information—having personally visited most of the mines in Cornwall.—MR. BIRDSEY trusts, by strict attention to the interests of those who may honour him with their confidence, to merit a continuance of their orders.

MR. BELL WILLIAMS, MINE-BROKER and VIEWER, 16, CASTLE-STREET, LIVERPOOL.

MR. JOHN DAVIES, MINING SHAREBROKER, No. 28, TOWER-BUILDINGS, TOWER-GARDEN, LIVERPOOL.

MINING, RAILWAY, AND AUCTION OFFICES, 52, THREADNEEDLE-STREET, LONDON.

Messrs. R. TREDNICK & CO., in thanking their friends and the public for their patronage at the Sale of Mining and Railway Shares, on Wednesday last, hope, by strict attention to the interest of all parties, to receive a continuance of their support.

THE NEXT SALE will be HELD on WEDNESDAY NEXT, the 29th day of January, 1851, and on the 5th of February.

Messrs. TREDNICK & CO. request that all ORDERS of SHARES for SALE be FORWARDED to them not later than MONDAY, the 20th inst., so as to allow their insertion in the catalogues, issued on the day preceding their sale.

NOTICE.—The CHIEF PROPRIETORS of the ROCKS and TREVERBYN UNITED TIN MINES, GREAT WHEAL BADDERN TIN and LEAD, PENDARVES and ST. AUBYN CONSOLS TIN and COPPER, and UNITY CONSOLS TIN and COPPER,—in the county of CORNWALL, Having their OFFICE at No. 51, KING-STREET, MANCHESTER, beg leave to acquaint the Public, that they have

OPENED OFFICES at No. 55, OLD BROAD-STREET, LONDON.

For the purpose of FORMING a METROPOLITAN CONNECTION with SELECT PARTIES, who alone will be received.

For particulars apply to W. W. TERRINGTON, Secretary, No. 55, Old Broad-street, City.—January 16, 1851.

CONSULTING AND ADVISING MINE AGENCY, OFFICES, No. 11, ADAM-STREET, ADELPHI.

Science and Experience have done much for Great Britain: a new era has commenced for that important branch of British Industry and Enterprise. It no longer ranks at the head of the hazardous undertakings of the day, but has become an enlarged and truly National Interest, and an inviting and profitable field for the INVESTMENT of CAPITAL. Guided by knowledge, discretion, and honourable management, there can be no more PROFITABLE than HOME MINING.

THE DESIGN of the Proprietors and Managers of this CONSULTING AND ADVISING MINE AGENCY is—to organise a system for securing the BEST ADVICE of the science and experience of the day;—to provide INFORMATION on the true state of MINING OPERATIONS GENERALLY, or in any PARTICULAR QUARTER DESIRED;—and to ASCERTAIN, as far as practicable, the TRUE VALUE of MINING SETTS, on the application of individuals or of companies.

With Connections extending into all the Mining Districts of the United Kingdom and Ireland, and aided by the experienced judgment of eminent Geologists, from whom special reports may be obtained, when required, the means and resources at command are of a character to justify the fullest confidence.

Apply, personally or by letter, to GEORGE J. SOPER.

BRITISH MUTUAL GOLD MINING COMPANY.

REGISTERED PURSUANT TO ACT OF PARLIAMENT.

Right Hon. LORD ERSKINE Chairman.

COUNT LOUIS DE MASSIAC, Deputy-Chairman.

Capital £50,000, in 50,000 shares, of £1 each.

ESTABLISHED FOR WORKING MINES IN CALIFORNIA, upon the principle of the JOINT CO-OPERATION OF LABOUR AND CAPITAL.

The Miners employed by this Company, whose comforts and protection are assured upon the rules and conditions contained in the prospectus, are to participate with the shareholders in the profits of the venture.

Shares to be sold on allotment—no calls or other responsibility whatever.

Applications for shares and prospectuses may be made at the Company's offices, No. 30, Great George-street, Westminster, where every information will be given.

Miners and others desirous of joining this Company on the terms of the prospectus may apply.—Prospectuses forwarded by post.

STIRLING'S PATENT YELLOW METALS.—Adapted for SHEATHING, BOLT STAVES, BOLT NAILS, DECK NAILS, as reported by the late Mr. Owen, Supervisor of Metals to the Admiralty; also for PROPELLERS, FRAMEWORK, SCREWS, PISTONS, OXENBOWS, COCKS (particularly where there is exposure to corrosion), RAILWAY CARRIAGE AXLE BEARINGS, and for all machinery subject to friction.

Agents, Messrs. GARDEN & MACANDREW, 34, Dowgate-hill, London.

Messrs. JOHNSON, 166, Buchanan-street, Glasgow.

Applications for licences and other information to be addressed to the undersigned, at Garden and Macandrew's, No. 34, Dowgate-hill. ALFRED BARRETT, Manager.

PARSEY'S COMPRESSED AIR-ENGINES, for LOCOMOTIVE, MINING, and OTHER PURPOSES, EFFECTS A VAST SAVING IN MACHINERY AND WORKING EXPENSES.—LICENCES GRANTED BY MR. PARSEY, Inventor and Patentee, No. 455, OXFORD-STREET, LONDON.

N.B.—Just published, a pamphlet, price 6d., COMPRESSED AIR-POWER and the COMPRESSED AIR-ENGINE POPULARLY DESCRIBED, with an Engraving. By Mr. PARSEY.—Sent to any party by enclosing eight postage stamps.

STEAM TO INDIA AND CHINA, via EGYPT.—Regular MONTHLY MAIL (steam conveyance) for PASSENGERS and LIGHT GOODS to CREYLON, MADRAS, CALCUTTA, PENANG, SINGAPORE, and HONG-KONG.

THE PENINSULAR AND ORIENTAL STEAM NAVIGATION COMPANY BOOK PASSENGERS and RECEIVE GOODS and PARCELS for the ABOVE PORTS by their steamers—starting from Southampton on the 20th of every month; and from Suez on or about the 10th of the month.

BOMBAY.—Passengers for Bombay can proceed by this company's steamers of the 29th of the month, to Malta, thence to Alexandria, by her Majesty's steamers, and from Suez by the Honourable East India Company's steamers.

MEDITERRANEAN.—MALTA.—On the 20th and 29th of every month. CONSTANTINOPLE.—On the 29th of the month. ALEXANDRIA.—On the 20th of the month.

SPAIN AND PORTUGAL.—Vigo, Oporto, Lisbon, Cadiz, and Gibraltar, on the 7th, 17th, and 27th of the month.

For plans of the vessels, rates of passage-money, and to secure passages and ship cargo, apply at the company's offices, No. 122, Leadenhall-street, London; and Oriental-place, Southampton.

WIRE ROPE.—The UNDERSIGNED having recently made extensive additions to their Machinery, respectfully solicit a TRIAL of their ROPES, which, in QUALITY of MATERIAL and PERFECTNESS of MANUFACTURE, cannot be surpassed.

Patent Wire Rope Works, 29, High-street, Wapping, London.

N.B.—The 34 miles of wire rope in the Wapping Tunnel, at Liverpool, was supplied from this establishment.

TO SMELTERS OF SILVER-LEAD ORES.—TO BE SOLD BY TENDER, the SMELTING WORKS, belonging to the Combmartin and North Devon Smelting Company, situated at COMBMARTIN, DEVON, on the verge of the Bristol Channel, within 200 yards of the harbour of Combmartin—the freight of coals from South Wales being 2s. 6d. per ton.

The present works are capable of smelting 100 tons of lead ore per month, and consist of one flowing furnace, two calciners, two refiners, one reviver.

Tenders to be sent in, on or before the 10th of February next, addressed to Mr. Willshire, Newport, near Barnstaple.

The Directors of the Company do not bind themselves to accept the highest or any tender.

The premises may be viewed by application to Capt. Bowden, Smelting Works, Combmartin, near Ilfracombe, Devon.

TO COPPER SMELTERS AND MINE OWNERS.—The Advertiser has an OPEN SALE for upwards of 800 tons of SULPHATES of IRON and COPPER (green copperas and blue stone), to be delivered in quantities of not less than 20 tons, between the months of March and October, and is desirous of RECEIVING SAMPLES of the same, accompanied with prices and conditions, from a producer, who is in a position to supply this quantity, and enter into a *bona fide* arrangement.

Address letters and samples (pre-paid) to "H. T. C." H. B. Bourne, Esq., No. 4, East India Chambers, Leadenhall-street, City.

TO TIN-PLATE MANUFACTURERS.—WANTED, a PRACTICAL TIN-PLATE MAKER, thoroughly acquainted with the manufacture in all its branches, from the pig-iron to the finished tin-plates; also qualified to SUPERINTEND the ERECTION of FORGES, MILLS, and OTHER WORKS, for that purpose. Satisfactory references will be required.—Address personally, or by letter (post paid), to Messrs. James and Greenham, Lydney, Gloucestershire.—Jan. 21, 1851.

TO CHAINMAKERS.—The COMMITTEE of the REGENT'S CANAL COMPANY are ready to RECEIVE TENDERS for the SUPPLY of ONE THOUSAND TWO HUNDRED LINEAL YARDS OF ELEVEN-SIXTEENTHS BEST ATTESTED, CLOSE, SHORT-LINKED CHAIN, at the City-road Basin.

Tenders to be delivered at this office, not later than Twelve o'clock, on the 29th inst.

EDMUND L. SNEE, Secretary.

Regent's Canal Office, City-road Basin, January 16, 1851.

WANTED.—A respectable PARTY to undertake the PRACTICAL MANAGEMENT of an IRON WORK in one of the English counties: he must be fully competent to conduct the whole work, from the mouth of the pit to the finished bar, hoop, or sheet-iron. Satisfactory references will be required.—Address (pre-paid) "J. S." at the office of the Mining Journal, 26, Fleet-street, London.

MINE MATERIALS WANTED.—TWO HUNDRED and FORTY FATHOMS of SECOND-HAND FLAT-RODS, about 24 or 24-inch PULLEYS for the SAME; TWO SETS of BOB-WORK; TEN FATHOMS of 3-inch PUMPS, CAPSTAN, and SHEARS.—Address the Secretary of the North Winal Robert Mining Company, 20, St. Helen's-place, London.

STEAM-ENGINE WANTED.—A 60-in. cylinder PUMPING ENGINE, for a MINE in CORNWALL: would have no objection purchasing an Engine and the Materials of a Mine, or an Engine by itself; a few inches in the cylinder either way would not be objected to.—Direct, stating full particulars, with price, to Mr. King, 23, Threadneedle-street, London.

BOTTLE HILL MINE, PLYMOUTH ST. MARY, DEVON.—WANTED TO PURCHASE, a STEAM-ENGINE and BOILER WATER-WHEELS, STAMPING and DRESSING MACHINERY, PUMPS, LIFTS, &c. &c. for READY MONEY.—Applications to be addressed to Capt. T. Dunn, on the mine; or to the offices of the Company, 3, Walbrook-buildings, London.

IRON PYRITES, UMBER, AND POTTERS' CLAY.—THE DIRECTORS of the PENNANT and CRAIGWEN CONSOLIDATED LEAD MINING COMPANY, of DINAS MOWDDWY, near Dolgelly, Merionethshire, beg to call the attention of Manufacturers and others interested to their SAMPLES of the ABOVE ARTICLES, which are of a superior quality—the Pyrites being free from arsenic, and the UMBER containing strong coloring matter, either of which they are prepared to supply at a short notice, and in any quantity.—The samples may be seen on applying to Mr. W. E. Taylor, at the Company's office, 4, Austinfriars, Old Broad-street, London.

TO BE LET, in Lots, for MINING PURPOSES, in NORTH WALES, for a term of 21 years, all that EXTENSIVE RANGE of METALLIFEROUS MOUNTAIN LANDS, part of the ABER HIRNANT ESTATE, within a few miles of the valuable Llangannog Lead Mines, the lode of which has been traced through the property, which is also intersected by various promising lodes, indicative of LEAD and COPPER—LIMESTONE abounds. The Crown claims have been redeemed.

Apply for particulars to Mr. W. Jones, Lion Hotel, Bala.

MINING SETT.—A MINING SETT in the EAST of CORNWALL, of which several practical Miners and a Geologist have given favorable and satisfactory reports, is ready to be GRANTED on the usual mining conditions to any respectable parties having capital at hand to work it.

FIVE WELL-DEFINED LODES have been traced through the sett, and the immediate outcrop to lay open the mine is estimated at a comparatively small amount.

Particulars may be obtained from Mr. Colling, solicitor, Okehampton, Devon, or Capt. John Penrose, of the Devon Great Tincroft Mine, at Moretonhampstead, Devon.

*None need apply who have not the means at hand to go to work, and respectability and responsibility will be required.

MINING COMPANY OF WALES.—PROSPECTUSES, containing REPORTS on the MINES and QUARRIES of the COMPANY, Terms and Conditions of its Government, &c., may be had of ST. PIERRE FOLEY, Secretary, to whom letters on the allotment of shares, and on the general business of the Company, are to be addressed.—Offices, 24, Lincoln's Inn-fields, London.

BERGWESSIN SILVER-LEAD MINING COMPANY.

—The SHAREHOLDERS are requested to MEET in GREGORY'S HOTEL, No. 29, CHEAPSIDE, on WEDNESDAY, the 29th of January, 1851, at noon precisely, on important business.

AUSTRALIAN MINING COMPANY.—Notice is hereby given, that, at the request of some of them, an EXTRAORDINARY GENERAL MEETING of the shareholders of the AUSTRALIAN MINING COMPANY will be HELD at the Company's office, 1, Adelaide-place, in the City of London, on Monday, the 3rd day of February, 1851, at Twelve of the clock in the forenoon precisely, to consider the propriety of appointing, and, if so determined, of appointing a Committee of five of the shareholders to inquire into the Affairs of the Company, with such powers and authorities as the meeting may deem necessary, and to Report thereon to a future General Meeting.

1, Adelaide-place, London-bridge, January 17, 1851.

CONSOLIDATED COPPER MINES OF COBRE ASSOCIATION.—Notice is hereby given, that a HALF-YEARLY GENERAL MEETING of the proprietors of this Association will be HELD, in conformity with the Deed of Settlement, at the office of the Company, 26, Austinfriars, on Tuesday, the 29th day of January inst., at One o'clock precisely. On that day two directors—viz., Sir John Fife, Bart., and George Whitmore, Esq.; and one auditor, Francis Mills, Esq.—will go out of office by rotation, agreeably to the Deed of Settlement, and be immediately re-eligible, and are candidates for re-election.

It is necessary that persons intending to offer themselves as Candidates for the Direction and Auditorship should leave Notice of such their intention with the Secretary, at the office of the Company, No. 26, Austinfriars, at least 14 clear days before the day of election.

By order of the Court of Directors.

26, Austinfriars, January 10, 1851. WM. LECKIE, Secretary.

COPIAPO MINING OFFICE, No. 22, Austinfriars, January 18, 1851.—Notice is hereby given, that the HALF-YEARLY MEETING of the shareholders in this Company will be HELD at their office, 22, Austinfriars, on Thursday, the 30th inst., at One o'clock precisely.

By order of the Directors. FRED. GRELLET, Secretary.

WHEAL MAY MINING COMPANY.—A GENERAL BI-MONTHLY MEETING of the adventurers in the WHEAL MAY SILVER-LEAD AND COPPER MINE will be HELD at the Hall of Commerce, Threadneedle-street, London, on Thursday, the 30th January inst. All shareholders are particularly requested to attend.—The chair to be taken at Twelve o'clock precisely.

15, Old Broad-street, Jan. 24, 1851. HENRY PEET, Secretary.

CHEMICAL ANALYSIS, &c.—ANALYSIS AND ASSAYS, or INVESTIGATIONS of ANY KIND, are UNDERTAKEN at the COLLEGE of CHEMISTRY, LIVERPOOL.

Professor—DR. SHERIDAN MURPHY, F.R.S.E.

Hon. Assistant—MR. JOSEPH DANSON, F.C.S.

A list of Fees for Analysis, and for Students Working in the Laboratory, may be obtained by writing to Dr. Murphy, College of Chemistry, Liverpool.

GEOLOGICAL MINERALOGY.—King's College, London.

Professor TENNANT, F.G.S., will COMMENCE the SECOND PART of his COURSE, consisting of Ten Lectures, ON MINERALOGY, with a view to Facilitate the Study of Geology, and of the Application of Mineral Substances in the Arts.

</

Original Correspondence.

COMPENDIUM OF BRITISH MINING.—No. III.

SIR,—In your Journal of the 11th inst., Mr. Watson states—"That the richest and most numerous veins of copper ore are generally discovered in killas (clay-slate), at no great distance from the granite, and are sought after any where else by cautious miners. In deep mines the killas sometimes passes through the granite, and is continued in granite." I must revert to the old Cornish miner's adage—"Where it is, there it is," showing that, with all the judgment and practical experience our forefathers possessed, and displayed in searching for veins of ore, and working them afterwards, still errors in judgment were as frequent then as now. This induced them to adopt the above trite saying, as a general salvo—a kind of "errors excepted"—whenever their respective bigoted theories were exploded by one or other of the miraculous and numerous variations that the geological structure of our subterranean strata is diversified by. Thus the saying, "Where it is, there it is," became a sort of "Holloway's Pill" cure for all their errors, mistaken judgments, and hypothetical notions. It will ever prove a vain attempt to reconcile a multitude of facts observable in our mines with any known natural causes.

Neither "the richest nor yet the most numerous veins of copper ore," have been discovered as stated. From many instances as to riches, take Wheal Music, Wheal Leisure, and Great St. George, all distant from the granite. Some of the produce from the latter readily sold at 45l. per ton. They were "cautious miners that sought after" those riches.

Many of our most productive mines have been, as numbers of them now are, near the junction of the killas and granite; and I have seen good courses of ore where one wall of the lode has been granite, the other slate. It frequently happens that one is slate, the other elvan; while at Lanes-cott were found copper veins rich in the vicinity of ironstone. There is no general feature to be depended on. What enhances the value of a lode in one district, utterly destroys it in another—instances of which are too numerous to specify; so, likewise, are the number of lodes distant from the junction before-named that are being wrought at this time.

With respect to "the lodes in deep mines passing through killas, and continued in granite," I cannot discover the conclusion Mr. Watson arrives at; therefore, beg to remark that Tresavean, 360 fms. deep, is in granite; the lode rich to that depth. Above that level eastward it continued so through Barrier, in the 248 fm. level, and is now driving east of Michael's shaft, in Treviskey Mine, from whence the dividends making are derived (15l. a share declared yesterday; 73l. per share during the last 12 months). The shallow levels are in killas, and have hitherto proved unproductive. The next paragraph I have to notice is—"That there is a very general idea that a lode which has been rich in one part is likely to be rich in every other. In Wheal Ann, 30,000l. were lost in exploring the same lode as had been rich in Wheal Alfred. In Burncoose (Carn Brea), the adventurers laid out and lost a large sum on the lode, which had been productive in Cook's Kitchen and Tincroft." I can by no means admit such an idea to be "general," or that any lode ever was, or will be, found as stated. Every one that I have hitherto seen is quite contrary to that character. In scores of instances, the oftener they vary in size and quality, the more lasting and profitable they have proved to be. When I have found them gradually getting less and less in value, it has been a sure indication to me that they would speedily improve; and seldom has it turned out otherwise. As to the two cases produced—"Ann and Burncoose"—the pages of your Journal have, within the last quarter, announced that engines of ample power have as recently been put to work at both mines, to further explore the identical lodes referred to; and if persevered in, as I have no reason to doubt, they will be amply repaid for so doing—the very fact of their not proving rich in "every part," but variable, considerably enhances my opinion of their future value. Mr. Watson's sentiments, as to the "fairest method of working a mine—of its legitimate value," and caution to all before embarking in one, is so perfectly in unison with my own, that I cordially wish him success in all such under-take-in's.—ARGUS: Truro, Jan. 21.

ON THE GEOLOGICAL FEATURES OF THE TAVISTOCK DISTRICT.

SIR,—In your Journal of the 4th inst. I read a very interesting letter from Capt. Ennor, with reference to the metalliferous rocks of the Tavistock district. He very justly remarks that neither metalliferous ground, nor yet an oxidated ferruginous rock, or an ordinary porous gossan, are of themselves, no more than the mere junction of granite and killas, sufficient indications to warrant the anticipation of meeting with large masses of ore below. We have to study the angular bearing of the lode, and the direction of the grain or pores of the country, be that in granite or clay-slate, inasmuch as a deviation of a few degrees renders it unproductive, even in a metalliferous rock. Again, there is a great difference between the effect of an oblique cross-course and a right angle one, a vertical and an inclined one, and also with reference to the dip of the bedding and angular position of the cleavage planes. An experienced old miner—that is, not merely a pick and gad man, but an observing man, who sees and reasons, and studies the "why and because"—must know the difference in the productiveness of an east and west copper lode, when it bears a few degrees north of west, as compared to those parts running south of west, under similar conditions of rock and structure. He must also have observed the difference in the effect of north-east cross-courses, when compared to the north-west ones, &c. These, and numerous other points, are the elements by which we are to judge of the probable contents of lodes, and not by a mere vein or lode, and an oxidated crust, however favourable the appearances may be. In my paper on the Tavistock district, in 1848, I made the following observations—"It is now well proved by men of experience, that the occurrence of minerals in rocks, and in veins or lodes, is not the effect of blind chance and natural convulsions, but, according to laws and order, as beautiful as that observed in the economy of the vegetable kingdom; but the knowledge of these laws is not to be acquired in a day; and to know how to apply them correctly and usefully to mining requires long experience in mines, and acquaintance with various phenomena in every description of rock."

The medial strata, within the argillaceous series, was also dwelt on as being the main copper-bearing rock, which observation has been frequently made by me in several subsequent reports. These ideas appear to be now taken up by others, and embodied in their reports. The following is an abstract from the same paper:—"The circumscribed nature of the mineral parts of the lodes, together with that of the bunches conforming to the angle of the structure of the bounding rocks, and the important influence of oblique cross-courses, impermeable fookans, angular dip of the bedding, cleavage planes, and underlay of the lode, on the local accumulation of minerals within the limits of certain bands of rock, are well exemplified in the Great Devon Consols, and shows how very essential it is to know the laws by which metalliferous deposits are governed, for making a favourable selection of ground; and also to establish a judicious system of exploration, in accordance with the character of the mineral masses, so as to ensure successful results. Between Callington and Tavistock is an oblong nodule of granite, saddle shaped, covered in the middle by a coarse slate, similar to that fringing the base; the western peak forms Kit Hill, and the eastern Gunnis Lake, the highest point being about 1070 ft. above the level of the sea. This granite varies in structure from coarse to a fine crystalline grain, and, with the exception of small patches (Gunnis Lake and Heignton Down), its composition is essentially stanniferous, inasmuch as its component parts are felspar, quartz, with a large proportion of schorl and wolfram. The oxidated exfoliated surface of this granitic nodule is composed of quartz, schorl, and wolfram, reduced into a dark homogeneous mass, locally called hard capel, and when the ferruginous substance predominates it is called ironstone. This granite produces also veins of the same substance, in which, as well as in the superficial lapping, the tin ore is found in minute veins, and also disseminated through the mass. The tin mines bordering the granite are within the limits of the above compact lamellar schorl rock, which exfoliates from the crystalline structure. Succeeding this, in the ascending order, is a bed—less schorliferous and more hornblende, producing less tin ore and slightly cupriforous; but the actual quantity of copper depends on other local causes, which are explained in the sequel. In what may be termed the copper granite, the transition in the clay-slate passes through a variety of porphyry, locally termed elvan; whereas in tin granite the transition forms a hard schorl rock, quite uncongenial for the production of copper, the latter predominates at the junction of the granite in question.

The next ascending bed is of a pale brown or buff colour, varying according to local composition of the crystalline base, in some parts micaceous and often chloritic, and under favourable conditions produces large masses of iron and copper pyrites, and in some places, but more especially in the highly chloritic beds on the southern flank, a large proportion of silver ore

in combination. The superincumbent rock succeeding is the fine brown argillaceous bed (clay-slate), and is the one that has been found so productive in copper in the Tavistock and Callington districts, to the east and west of the granitic nucleus in question, and conformable to its dip at each extremity. It may be called the middle series of the clay-slate formation of this mining district. The Great Devon Consols, Bedford United, Holmbush, &c., are more or less confined to the above great metalliferous rock. The inferior division being generally compact and siliceous, producing comparatively but small and isolated bunches of copper ore, with tin, and the superficial bedding copper and iron pyrites in a state of dissemination; the same formation surrounding the Dartmoor granite is of a similar nature. It must be borne in mind, that however congenial a rock may be for mineral, unless there be other conditions, as previously stated, to favour chemical and mechanical action, it is worthless as a speculation. It may indicate a rich mineral ground, a fine quartzose and ferruginous gossan, and other pleasing superficial appearances, without containing bunches of ore sufficiently large to pay for working. Again, other spots may be found covered by the most uncongenial description of rock, the most unpropitious to the eye of an old miner, and yet having a metalliferous bed, with favourable conditions below, as at Wheal Friendship, &c.

These are questions that demand the serious attention of the person who may be called upon to give his opinion on any given mineral district. Too much importance is often given to the mere junction of granite and clay, slate, as favourable for the production of ore, notwithstanding that even this depends on composition and local conditions, without which such points may be totally barren. Granite is not stratified, yet we often see the term strata employed in reports of mines in granite. There are several elvan courses running nearly east and west from the Gunnis Lake granite towards the Dartmoor; they intersect the clay-slate series near East Liscombe and Morwell Down; the latter is cut in the tunnel of the Tavistock Canal, and is large, somewhat porous and ferruginous, subject to decomposition on the back, and is intersected very obliquely by the Wheal Russel and Devon and Courtenay lodes.—EVAN HOPKINS: Austinfriars, Jan. 20.

ORIGIN OF ORES IN LODS, &c.

SIR,—Your able correspondent, Mr. Ennor, frequently draws attention to mine reports, and often makes very excellent practical remarks thereon. Had it been possible to enter into such discussions without the risk of personalities, or effecting the value of the properties in question, they would have been taken up, and properly handled; but it is extremely difficult to do so, and this is the principal reason why I have abstained from entering into such matters. Capt. Dunstan's letter shows that mining speculators are no longer satisfied with a plain straightforward honest report; they must have embellishments, and even alter the meaning, and magnify the prospects by omissions and additions. Such acts should be exposed, and I am pleased to see that he has taken notice of it. That portion of the report alluded to in Mr. Ennor's letter deserves comment. A just and business-like report (where such is called for) is beyond the capacity of every pick and gad man, and still more so of those whom Mr. Ennor styles professors of mining. Nothing short of a thorough, practical, and scientific knowledge, reduced into a system as a business, can qualify a person to draw up a report worthy of being read amongst those who are daily engaged in permanent legitimate mining. But as this description of report is not often wanted, documents, answering the purpose of drawing attention to the speculation, are often prepared by parties, the results of whose judgment are seldom or ever brought forward hereafter as a test; they, therefore, have scope, to the full extent of the elasticity of their consciences, of making embellishments.

We have often two extremes of the class of men called to report on mines—the one a working miner, who can distinguish between a lode and a rock, and, when placed underground, knows how to drive on the lode, sink, and cross-cut, and the price per fm.; he may be ignorant of the meaning of the term strata, or the data required to give an opinion as to the future prospects beyond what he can see and touch; he may be an excellent man in a mine well explored, with a large proportion of reserved stopes, but totally incapable of giving a just opinion in any new ground, and more particularly so if that ground happens to differ, in the slightest degree, with the metalliferous features of the mine he has been accustomed to. The other extreme is a person who may possess a little smattering of science, geological terms, &c., and connected with some assumed theory, especially the one most in favour with the leading men—this being considered of much more importance than its agreement with the actual observed facts underground. The above, together with a few technical terms, borrowed from the working miner, is often sufficient to make a report, and give great satisfaction to the uninitiated proprietor. The former brings discredit on the judgment and capabilities of the real practical miner, and the latter on men of science.

A person undertaking to give a proper and correct report on any given ground should not only be, as above stated, a thoroughly practical man of science in every description of rock and mineral production, but should base his opinion solely on the merits of the ground in question, reasoning fairly on correct analogy, and never allowing pure theory to intrude in matters of business. The formation of sulphuret of lead, with a matrix containing upwards of 15 per cent. of water, chemically combined, from igneous eruptions, and other imaginary natural convulsions, is an idea not only irreconcilable with our present knowledge, but not admissible even in the ordinary loose mine reports.

Your readers are much indebted to Mr. Ennor for drawing attention to the absurdities we frequently see in print, and the necessity of capitalists being on their guard, if they mean to obtain a correct and faithful report, and desirous to lay out their money advantageously. EVAN HOPKINS. Austinfriars, Jan. 20.

THE ORIGIN OF ORES IN LODS—THE PENTIRE GLAZE MINE.

SIR,—Having been requested to reply to some remarks made by Mr. Ennor, respecting an extract from my report on the Pentire Glaze Mine, I do so, as it at the same time gives me the opportunity of adding my denial to those of Messrs. Rankin, Dunstan, and Bishop, to the assertion that either the reports of the two latter, with myself, as well as our private ones, were at all got up for the purpose of giving a fictitious value to this mine.

I had not met Messrs. Dunstan and Bishop prior to my interview at the mine, nor have I had any correspondence with them since, and the difference between the printed and written document (the latter being read at the meeting) has been fairly accounted for by Mr. Rankin.

On the subject of Mr. Ennor's letter, I may here observe that I shall always be willing to give, as I never fail to take opportunities of asking, information; whilst doing the former, I request, however, to observe that I can only spare time to answer parties, the general tenor of whose communications show that they are fully acquainted with the subject on which they are commenting. I regret, on Mr. Ennor's account, that his letter displays only a limited amount of information. Mr. Ennor asks, "If he (Mr. Rowlandson) ever saw galena or sulphuret of lead reduced by fusion, on a large scale, without becoming pig or tough lead?" My reply to the query is very brief. I have. Moreover, the separation of lead from ores much contaminated with zinc (blende or jack), bi-sulphuret of iron (mundic), and bi-sulphuret of copper, is founded on the fact just alluded to, and is practised on a large scale at the Saxony Mines, and could be advantageously adopted with the produce of many lodes in Cornwall, now unwrought. This subject has occupied my attention for some time, and I have had the further advantage of superintending the working of such ores on a large scale in one of the oldest and largest smelting establishments in England. From the various phenomena which have occasionally presented themselves to my notice, I have been enabled to gather that, under like conditions, the results are the same in the small scale that they are in nature, the only difference being between the puny efforts of man and the gigantic operations of Nature.

If I err in advocating the igneous theory of the formation of lodes, I do so in excellent company, as there is not a mining geologist of any repute, either British or foreign, that does not hold the same opinion. The quotation from my report, inserted in the *Mining Journal*, had no reference to the original formation of the lodes, but to an igneous action that had taken place subsequent to its formation; and, judging from the phenomena observed in connection with the old workings, and also the beautiful section seen at the cliff, I arrived at the conclusion that the superior, or shallow workings, had been materially affected by the adjoining erupted igneous rock—marked disturbances in the higher parts of the killas being visible, whilst in the lower portion the lode descended at a regular angle unfractured, a circumstance highly favourable to its continuance in depth, and that at lower levels very valuable deposits of ore would be found. Similar instances are found in other places; I may particularly mention at the Stiper Stones, in Shropshire, where the lead lode lies conformable for a considerable distance with the adjoining and underlying igneous rock. My opinion of the value of the mine was principally based on these facts, and not at all on the ore in sight (except collaterally) on any of the superficial workings. This opinion I expressed at the meeting very distinctly; it is liable, of course, to all the risks ordinarily attendant on mining, but I could not conceal from myself that the prospects of the adventurers were of the most promising nature.

Mr. Ennor has lugged in the "carbonate of lead, as if I was not aware of its

existence; I am not so little acquainted with these subjects not to know the fact that carbonate of lead, heated to a temperature which would fuse galena, would convert the former into oxide of lead. The carbonate of lead was formed, and is forming, from the sulphuret, by the agency of water: this can be seen in many mines, but particularly in some in the neighbourhood of Mold (North Wales), and at Alston Moor (Cumberland).—T. ROWLANDSON: Jan. 23.

PENTIRE GLAZE AND PENTIRE UNITED MINES.

SIR,—I have perused with some interest the several letters in your paper of last week, and shall hope to see Mr. Rowlandson's new system further explained. The purser, Mr. Rankin, in a letter to Capt. Dunstan, states it was not his "wish or intention to alter the report, and that it must have been done by Mr. Rowlandson in copying, and perhaps through oversight." This applies to the omission of the very important words "at different places." In his letter in the *Mining Journal*, he states, "the reports in the handwriting of Messrs. Rowlandson and Dunstan, from which the printer set up the type (a rough copy of which I forward to you, and from which I regret to find, as I have since been informed by Capt. Dunstan in the second paragraph, on the new or middle lode, the compositor has omitted after 'yielding,' the words 'in different places,' &c. This does not correspond. And whether Mr. Rowlandson, the compositor, or any other party omitted, 'perhaps through oversight,' the words, is not so important as that they were omitted. Is it, however, probable that in 'copying,' or 'perhaps through oversight,' the words 'yielding 15 tons of lead per month' should have found their way into this report. Has Capt. Dunstan words to this effect in the joint report of himself and Mr. Rowlandson, in relation to the backs of the lode (as I contend by the report) in the 22 fm. level, or any other part of the mine? And will those gentlemen state how many of the 22 fms. of productive ground on the new lode will yield from 1½ to 2 tons per fm. 2 Capt. Dunstan, Mr. Bishop, and the purser admit alterations, and therefore, I now leave the matter to be settled between them. I pass over the other allusions, and only beg to state, that I am not smarting under any reproach or disappointment, and leave 'the very bitter pill' to be swallowed by the purser; and contend that 28 fms. of ground, yielding from 1½ to 2 tons per fm., with 38 fms. of backs, would even, in a mine-like manner, produce 50 tons per month. I agree with the purser, 'that it does not say much for the credit of the mining world,' when persons 'knowing their high position,' impudently and unblushingly send for publication reports 'which they know and admit to have been materially altered.'—FAIR-PLAY: St. Austin, Jan. 22.

PENTIRE GLAZE AND PENTIRE UNITED MINES.

SIR,—In your Journal of last week I find that Capt. Dunstan, after admitting the omission of the words "at different places," has overlooked a most important addition to the report—viz.: instead of "yielding a small amount of lead," the report has substituted "yielding 15 tons of the latter (meaning lead) per month," which, in my last, you stated as "per fathom." I am glad to find in the purser's letter that he admits an alteration in the joint report, but says the omission of the words "at different places" was an omission of the compositor; but in his letter to Capt. Dunstan, he says that it must have been done by Mr. Rowlandson in copying. Might I ask the question, was it done by either? But by whom it was done, or for what purpose, I leave with the public to judge. I disdain the ungenerous and ungracious insinuations of the purser, and trust that, under management that my own, a larger amount of ores may be raised, and good dividends realised; but I know that without a further discovery, which cannot be made without a much further outlay, no such thing can be done. My late instructions have been to raise as much ore as possible. This I have endeavoured to do, and by doing so, I am sorry to say, I have nearly taken away all the ore in sight in the 28 fms. of ore ground in the back of the 10 fm. level, calculated for next sampling.

In the purser's letter to me, forwarding reports of the meeting, occur the following remarks:—"It is quite certain the returns must be increased somehow, and the mine made to pay her way, otherwise our reports will not be borne out, and we must seek some change. It is not improbable, supposing you cannot raise more ore by your present mode of working, that a party, well known to some of our shareholders, will be employed to inspect the mine, and lay down a plan for future workings. I regret to find from you that there is any doubt as to our monthly samplings, and am pleased to receive the assurance that you will stretch every nerve to prevent a falling off, &c."

I am not the writer nor the author of the letter, signed "Fair Play," as the purser seems to insinuate, and whom he calls docile and intelligent; but the letters in the Journal of last week show that he is not much in error in making the remarks he appears to have done. The reasons of my resignation are well known to one of the principal adventurers in these mines; and if he chooses to make them public, he is at liberty to do so. Jan. 22. WILLIAM BISHOP.

SOUTH WHEEL MARIA.

SIR,—Observing in your Journal of last week a communication from Mr. W. Stephens, of Calstock, stating that South Maria sett is forfeited, and that he had granted a lease to a new company, I beg leave, through your valuable columns, to inform all interested, that South Wheel Maria settlers still claim possession of the mine, and do not recognise any power in Mr. W. Stephens to forfeit their rights, or encroach on their privileges; and, further, that we shall treat as trespassers, to the utmost extent of the law, any and every person found on the mine for illegal purposes. The South Maria Company have in no single act or instance behaved dishonourably to Mr. Stephens, and justly complain of this attempt of his to break faith with the adventurers. On stopping the machinery for repairs, and to settle the question of the "veil-head," there was no desire on his part expressed for the company to abandon the mine; on the contrary, his every act appeared to sanction their holding on, to improve their position—his own excuse being, that we had expended a large sum of money, and he wished us to try the mine further. In proof of this, I need only state, that he attended meetings, signed the resolutions, voted with us as one of the company; and no later than November last, in the presence of the agents of Devon Great Consols, he was present at the settling of the question of the acknowledged right of the South Maria Company to grant leave to the Devon Consols agents to lodge materials on the South Maria sett, on the Cornish bank of the Tamar, during the repairs of their term of lease, about seven years. In fact, he has ever acted in concert with us, and has said and done everything as a shareholder himself, in common with others, to assist in promoting a further trial of the mine. He has even gone so far as to agree with Mr. Sims, of Tavistock, and myself, for an extension of our term for a sum of money from the present adventurers; nor has he ever served any notice of intended forfeiture, or to quit the property. The lease and materials have even been offered to him, if he would purchase our interest, which he declined, on the ground that he had no party to take it, and he then expressed a wish that we should further try it.

I boldly assert that the party at the bottom of all this treachery is J. Baron, of Lostwithiel, who holds three shares in the present company—who, as an adventurer, has extorted from me every information touching the position of the mine, the nature of the lodes, &c.; and, privately assisted by a town agent, has induced Mr. Stephens to take the unenviable position he has assumed, to the injury of the adventurers, to whom a new grant was promised, and would long since have been settled, had not the land been encumbered, and had Mr. Stephens been qualified to make a legal overture. I hereby, as agent for the South Maria Company, announce to all concerned that the adventurers with whom I am connected will unitedly resist this clandestine, unfair, and illegal attack on our rights and property as a company. I should hope, then, any parties who may have joined J. Baron and his London broker in this affair, will value their reputation for repair, and to settle the question of the "veil-head," there was no desire on his part expressed for the company to abandon the mine; on the contrary, his every act appeared to sanction their holding on, to improve their position—his own excuse being, that we had expended a large sum of money, and he wished us to try the mine further. In proof of this, I need only state, that he attended meetings, signed the resolutions, voted with us as one of the company; and no later than November last, in the presence of the agents of Devon Great Consols, he was present at the settling of the question of the acknowledged right of the South Maria Company to grant leave to the Devon Consols agents to lodge materials on the South Maria sett, on the Cornish bank of the Tamar, during the repairs of their term of lease, about seven years. In fact, he has ever acted in concert with us, and has said and done everything as a shareholder himself, in common with others, to assist in promoting a further trial of the mine. He has even gone so far as to agree with Mr. Sims, of Tavistock, and myself, for an extension of our term for a sum of money from the present adventurers; nor has he ever served any notice of intended forfeiture, or to quit the property. The lease and materials have even been offered to him, if he would purchase our interest, which he declined, on the ground that he had no party to take it, and he then expressed a wish that we should further try it.

I boldly assert that the party at the bottom of all this treachery is J. Baron, of Lostwithiel, who holds three shares in the present company—who, as an adventurer, has extorted from me every information touching the position of the mine, the nature of the lodes, &c.; and, privately assisted by a town agent, has induced Mr. Stephens to take the unenviable position he has assumed, to the injury of the adventurers, to whom a new grant was promised, and would long since have been settled, had not the land been encumbered, and had Mr. Stephens been qualified to make a legal overture. I hereby, as agent for the South Maria Company, announce to all concerned that the adventurers with whom I am connected will unitedly resist this clandestine, unfair, and illegal attack on our rights and property as a company. I should hope, then, any parties who may have joined J. Baron and his London broker in this affair, will value their reputation for repair, and to settle the question of the "veil-head," there was no desire on his part expressed for the company to abandon the mine; on the contrary, his every act appeared to sanction their holding on, to improve their position—his own excuse being, that we had expended a large sum of money, and he wished us to try the mine further. In proof of this, I need only state, that he attended meetings, signed the resolutions, voted with us as one of the company; and no later than November last, in the presence of the agents of Devon Great Consols, he was present at the settling of the question of the acknowledged right of the South Maria Company to grant leave to the Devon Consols agents to lodge materials on the South Maria sett, on the Cornish bank of the Tamar, during the repairs of their term of lease, about seven years. In fact, he has ever acted in concert with us, and has said and done everything as a shareholder himself, in common with others, to assist in promoting a further trial of the mine. He has even gone so far as to agree with Mr. Sims, of Tavistock, and myself, for an extension of our term for a sum of money from the present adventurers; nor has he ever served any notice of intended forfeiture, or to quit the property. The lease and materials have even been offered to him, if he would purchase our interest, which he declined, on the ground that he had no party to take it, and he then expressed a wish that we should further try it.

I boldly assert that the party at the bottom of all this treachery is J. Baron, of Lostwithiel, who holds three shares in the present company—who, as an adventurer, has extorted from me every information touching the position of the mine, the nature of the lodes, &c.; and, privately assisted by a town agent, has induced Mr. Stephens to take the unenviable position he has assumed, to the injury of the adventurers, to whom a new grant was promised, and would long since have been settled, had not the land been encumbered, and had Mr. Stephens been qualified to make a legal overture. I hereby, as agent for the South Maria Company, announce to all concerned that the adventurers with whom I am connected will unitedly resist this clandestine, unfair, and illegal attack on our rights and property as a company. I should hope, then, any parties who may have joined J. Baron and his London broker in this affair, will value their reputation for repair, and to settle the question of the "veil-head," there was no desire on his part expressed for the company to abandon the mine; on the contrary, his every act appeared to sanction their holding on, to improve their position—his own excuse being, that we had expended a large sum of money, and he wished us to try the mine further. In proof of this, I need only state, that he attended meetings, signed the resolutions, voted with us as one of the company; and no later than November last, in the presence of the agents of Devon Great Consols, he was present at the settling of the question of the acknowledged right of the South Maria Company to grant leave to the Devon Consols agents to lodge materials on the South Maria sett, on the Cornish bank of the Tamar, during the repairs of their term of lease, about seven years. In fact, he has ever acted in concert with us, and has said and done everything as a shareholder himself, in common with others, to assist in promoting a further trial of the mine. He has even gone so far as to agree with Mr. Sims, of Tavistock, and myself, for an extension of our term for a sum of money from the present adventurers; nor has he ever served any notice of intended forfeiture, or to quit the property. The lease and materials have even been offered to him, if he would purchase our interest, which he declined, on the ground that he had no party to take it, and he then expressed a wish that we should further try it.

I boldly assert that the party at the bottom of all this treachery is J. Baron, of Lostwithiel, who holds three shares in the present company—who, as an adventurer, has extorted from me every information touching the position of the mine, the nature of the lodes, &c.; and, privately assisted by a town agent, has induced Mr. Stephens to take the unenviable position he has assumed, to the injury of the adventurers, to whom a new grant was promised, and would long since have been settled, had not the land been encumbered, and had Mr. Stephens been qualified to make a legal overture. I hereby, as agent for the South Maria Company, announce to all concerned that the adventurers with whom I am connected will unitedly resist this clandestine, unfair, and illegal attack on our rights and property as a company. I should hope, then, any parties who may have joined J. Baron and his London broker in this affair, will value their reputation for repair, and to settle the question of the "veil-head," there was no desire on his part expressed for the company to abandon the mine; on the contrary, his every act appeared to sanction their holding on, to improve their position—his own excuse being, that we had expended a large sum of money, and he wished us to try the mine further. In proof of this, I need only state, that he attended meetings, signed the resolutions, voted with us as one of the company; and no later than November last, in the presence of the agents of Devon Great Consols, he was present at the settling of the question of the acknowledged right of the South Maria Company to grant leave to the Devon Consols agents to lodge materials on the South Maria sett, on the Cornish bank of the Tamar, during the repairs of their term of lease, about seven years. In fact, he has ever acted in concert with us, and has said and done everything as a shareholder himself, in common with others, to assist in promoting a further trial of the mine. He has even gone so far as to agree with Mr. Sims, of Tavistock, and myself, for an extension of our term for a sum of money from the present adventurers; nor has he ever served any notice of intended forfeiture, or to quit the property. The lease and materials have even been offered to him, if he would purchase our interest, which he declined, on the ground that he had no party to take it, and he then expressed a wish that we should further try it.

I boldly assert that the party at the bottom of all this treachery is J. Baron, of Lostwithiel, who holds three shares in the present company—who, as an adventurer, has extorted from me every information touching the position of the mine, the nature of the lodes, &c.; and, privately assisted by a town agent, has induced Mr. Stephens to take the unenviable position he has assumed, to the injury of the adventurers, to whom a new grant was promised, and would long since have been settled, had not the land been encumbered, and had Mr. Stephens been qualified to make a legal overture. I hereby, as agent for the South Maria Company, announce to all concerned that the adventurers with whom I am connected will unitedly resist this clandestine, unfair, and illegal attack on our rights and property as a company. I should hope, then, any parties who may have joined J. Baron and his London broker in this affair, will value their reputation for repair, and to settle the question of the "veil-head," there was no desire on his part expressed for the company to abandon the mine; on the contrary, his every act appeared to sanction their holding on, to improve their position—his own excuse being, that we had expended a large sum of money, and he wished us to try the mine further. In proof of this, I need only state, that he attended meetings, signed the resolutions, voted with us as one of the company; and no later than November last, in the presence of the agents of Devon Great Consols, he was present at the settling of the question of the acknowledged right of the South Maria Company to grant leave to the Devon Consols agents to lodge materials on the South Maria sett, on the Cornish bank of the Tamar, during the repairs of their term of lease, about seven years. In fact, he has ever acted in concert with us, and has said and done everything as a shareholder himself, in common with others, to assist in promoting a further trial of the mine. He has even gone so far as to agree with Mr. Sims, of Tavistock, and myself, for an extension of our term for a sum of money from the present adventurers; nor has he ever served any notice of intended forfeiture, or to quit the property. The lease and materials have even been offered to him, if he would purchase our interest, which he declined, on the ground that he had no party to take it, and he then expressed a wish that we should further try it.

I boldly assert that the party at the bottom of all this treachery is J. Baron, of Lostwithiel, who holds three shares in the present company—who, as an adventurer, has extorted from me every information touching the position of the mine, the nature of the lodes, &c.; and, privately assisted by a town agent, has induced Mr. Stephens to take the unenviable position he has assumed, to the injury of the adventurers, to whom a new grant was promised, and would long since have been settled, had not the land been encumbered, and had Mr. Stephens been qualified to make a legal overture. I hereby, as agent for the South Maria Company, announce to all concerned that the adventurers with whom I am connected will unitedly resist this clandestine, unfair, and illegal attack on our rights and property as a company. I should hope, then, any parties who may have joined J. Baron and his London broker in this affair, will value their reputation for repair, and to settle the question of the "veil-head," there was no desire on his part expressed for the company to abandon the mine; on the contrary, his every act appeared to sanction their holding on, to improve their position—his own excuse being, that we had expended a large sum of money, and he wished us to try the mine further. In proof of this, I need only state, that he attended meetings, signed the resolutions, voted with us as one of the company; and no later than November last, in the presence of the agents of Devon Great Consols, he was present at the settling of the question of the acknowledged right of the South Maria Company to grant leave to the Devon Consols agents to lodge materials on the South Maria sett, on the Cornish bank of the Tamar, during the repairs of their term of lease, about seven years. In fact, he has ever acted in concert with us, and has said and done everything as a shareholder himself, in common with others, to assist in promoting a further trial of the mine. He has even gone so far as to agree with Mr. Sims, of Tavistock, and myself, for an extension of our term for a sum of money from the present adventurers; nor has he ever served any notice of intended forfeiture, or to quit the property. The lease and materials have even been offered to him, if he would purchase our interest, which he declined, on the ground that he had no party to take it, and he then expressed a wish that we should further try it.

I boldly assert that the party at the bottom of all this treachery is J. Baron, of Lostwithiel, who holds three shares in the present company—who, as an adventurer, has extorted from me every information touching the position of the mine, the nature of the lodes, &c.; and, privately assisted by a town agent, has induced Mr. Stephens to take the unenviable position he has assumed, to the injury of the adventurers, to whom a new grant was promised, and would long since have been settled, had not the land been encumbered, and had Mr. Stephens been qualified to make a legal overture. I hereby, as agent for the South Maria Company, announce to all concerned that the adventurers with whom I am connected will unitedly resist this clandestine, unfair, and illegal attack on our rights and property as a company. I should hope, then, any parties who may have joined J. Baron and his London broker in this affair, will value their reputation for repair, and to settle the question of the "veil-head," there was no desire on his part expressed for the company to abandon the mine; on the contrary, his every act appeared to sanction their holding on, to improve their position—his own excuse being, that we had expended a large sum of money, and he wished us to try the mine further. In proof of this, I need only state, that he attended meetings, signed the resolutions, voted with us as one of the company; and no later than November last, in the presence of the agents of Devon Great Consols, he was present at the settling of the question of the acknowledged right of the South Maria Company to grant leave to the Devon Consols agents to lodge materials on the South Maria sett, on the Cornish bank of the Tamar, during the repairs of their term of lease, about seven years. In fact, he has ever acted in concert with us, and has said and done everything as a shareholder himself, in common with others, to assist in promoting a further trial of the mine. He has even gone so far as to agree with Mr. Sims, of Tavistock, and myself, for an extension of our term for a sum of money from the present adventurers; nor has he ever served any notice of intended forfeiture, or to quit the property. The lease and materials have even been offered to him, if he would purchase our interest, which he declined, on the ground that he had no party to take it, and he then expressed a wish that we should further try it.

I boldly assert that the party at the bottom of all this treachery is J. Baron, of Lostwithiel, who holds three shares in the present company—who, as an adventurer, has extorted from me every information touching the position of the mine, the nature of the lodes, &c.; and, privately assisted by a town agent, has induced Mr. Stephens to take the unenviable position he has assumed, to the injury of the adventurers, to whom a new grant was promised, and would long since have been settled, had not the land been encumbered, and had Mr. Stephens been qualified to make a legal overture. I hereby, as agent for the South Maria Company, announce to all concerned that the adventurers with whom I am connected will unitedly resist this clandestine, unfair, and illegal attack on our rights and property as a company. I should hope, then, any parties who may have joined J. Baron and his London broker in this affair, will value their reputation for repair, and to settle the question of the "veil-head," there was no desire on his part expressed for the company to abandon the mine; on the contrary, his every act appeared to sanction their holding on, to improve their position—his own excuse being, that we had expended a large sum of money, and he wished us to try the mine further. In proof of this, I need only state, that he attended meetings, signed the resolutions, voted with us as one of the company; and no later than November last, in the presence of the agents of Devon Great Consols, he was present at the settling of the question of the acknowledged right of the South Maria Company to grant leave to the Devon Consols agents to lodge materials on the South Maria sett, on the Cornish bank of the Tamar, during the repairs of their term of lease, about seven years. In fact, he has ever acted in concert with us, and has said and done everything as a shareholder himself, in common with others, to assist in promoting a further trial of the mine. He has even gone so far as to agree with Mr. Sims, of Tavistock, and myself, for an extension of our term for a sum of money from the present adventurers; nor has he ever served any notice of intended forfeiture, or to quit the property. The lease and materials have even been offered to him, if he would purchase our interest, which he declined, on the ground that he had no party to take it, and he then expressed a wish that we should further try it.

I boldly assert that the party at the bottom of all this treachery is J. Baron, of Lostwithiel, who holds three shares in the present company—who, as an adventurer, has extorted from me every information touching the position of the mine, the nature of the lodes, &c.; and, privately assisted by a town agent, has induced Mr. Stephens to take the unenviable position he has assumed, to the injury of the adventurers, to whom a new grant was promised, and would long since have been settled, had not the land been encumbered, and had Mr. Stephens been qualified to make a legal overture. I hereby, as agent for the South Maria Company, announce to all concerned that the adventurers with whom I am connected will unitedly resist this clandestine, unfair, and illegal attack on our rights and property as a company. I should hope, then, any parties who may have joined J. Baron and his London broker in this affair, will value their reputation for repair, and to settle the question of the "veil-head," there was no desire on his part expressed for the company to abandon the mine; on the contrary, his every act appeared to sanction their holding on, to improve their position—his own excuse being, that we had expended a large sum of money, and he wished us to try the mine further. In proof of this, I need only state, that he attended meetings, signed the resolutions, voted with us as one of the company; and no later than November last, in the presence of the agents of Devon Great Consols, he was present at the settling of the question of the acknowledged right of the South Maria Company to grant leave to the Devon Consols agents to lodge materials on the South Maria sett, on the Cornish bank of the Tamar, during the repairs of their term of lease, about seven years. In fact, he has ever acted in concert with us, and has said and done everything as a shareholder himself, in common with others, to assist in promoting a further trial of the mine. He has even gone so far as to agree with Mr. Sims, of Tavistock, and myself, for an extension of our term for a sum of money from the present adventurers; nor has he ever served any notice of intended forfeiture, or to quit the property. The lease and materials have even been offered to him, if he

boiling point, I retreated from the room, with feelings that "where ignorance is bliss 'tis folly to be wise;" and if this knowledge of the internal workings of the earth be the result of the Geological Society, established in the town of Ashburton, I can only state that, according to my humble ideas, it is calculated to do far less good in the diffusion of useful knowledge than harm, in alarming the unlearned in such science, amongst whom must be numbered
 Ashburton, Jan. 8.

A WORD OR TWO ON MININ' SUBJECTS.

MISSER EDITOR.—How are 'ee? Bein' in Town on a little business there beant no necessity to allude to, I thout I would just write 'ee a line or two, to tell 'ee how things be goin' on in t' county. I can tell 'ee minin' matters is lookin' brisk and no mistake, and a surpris' lot of Bals is bein' set to work, and I have a notion if the Agents, and the Cap'n's, and the Purser's will act like honest men, minin' will take that position in the world I consider it is fairly entitled to occupy. There's no mistake about every district lookin' well; I never, sin' I can recollect, remember seein' the Bals everywhere in such a promisin' state; it really makes one's old heart quite leap for joy it does, and I am sure Misser Editor there's will be delighted, for 'ee be a decent fellow I think, though 'un do gammon us Cornish abut about the prices of shares. There 'ee need n't look savage; I doan't suppose it be there fault, it's them infernal Brokers darn 'em as deceives us, puttin' such fictitious prices in there columns. I wish I had one or two on down to our Bal at Redruth, and if we didn't give 'un somethin' rayther different to Count House Punch, for imposin' upon innocent people, my name's Cap'n Timothy Tribute to Penzance. I was to San Auzel a few days ago, and there I met Cap'n Tom Barytes, theee heerd o' he no doubt, Cap'n Tom to Bodmin I mean. Cap'n Tom says I, "the thing be plain as plain can be. The Lannuners be willin' to embark their capital if we will promise fair play." "Now," says I, "Cap'n Tom, don't 'ee think we shall be fightin' agin our own interest, quarrellin' with our bread if we don't be honest? What be a temporary advantage Cap'n Tom, to a lastin' benefit? Nothin' at all. We may gain the former by resortin' to the trickery that was in vogue in the last rage for Minin' Specs, but at the same time Cap'n we shall lose the latter, and most desirable advantage, for depend on it Cap'n when our knavery is discovered, people will character damaged, and the whole county Cap'n will again be the scene of abandoned Bals, unemployed Cap'n's, and starving Miners, and sorrowful Agents, and comfortless homes, and bankrupt trademen." "Cap'n Tim," says he, "Thee talk like a feelosopher, and I for one will do as 'ee mention." "Twee 'un and I Misser Editor the Cornish aint so very bad after all, nine-tenths of the fault lie at the door of those who introduce the adventurers to the Public, and who having got their profits, go on thar way rejoicin' like that such innocent people as we exist to bear all the oium of the matter. Of all the fellows for impudence I ever see, the Lannun Sharebrokers be the out and outdest! I would'n't be one 'un for somethin' what I've seen of thar wicked ways."

There be one thing Misser Editor I will mention to 'ee if there's no objection. It's a matter as I talked over with Cap'n Sam Addit to Truro, Cap'n Jim Capel to San Cleer, and one or two others a few nights ago at Channon's at Liskeard, just afore I comed to Town, and I did promise 'un I would write 'ee about it, as 'un all considered it of wital consequence just at the present moment, Minin' matters bein' in the ascendant, to make use of an astronomical observation. The thing Misser Editor be this, there be a kind of feelin' among parties gone into Minin' matters for the first time, that success in such adventures is immediate—that as soon as they take shares in a Bal they step into enormous profits. I knows very well what has produced the idea, it's the gentlemen I have mentioned afore darn 'em, they be at the bottom of all the mischief in Minin' matters. However, I tell 'ee what Misser Editor, the sentiments be very delusive ones, and the sooner they be gotten rid of the better for one's peace of mind. It be all very fine for the Brokers, darn 'em again say I, to tell the Public when recommendin' shares in any consarn, that there's a course of ore discovered 'at 'ill give profits immediate! I knows better, and these promises Misser Editor, these statements of the Brokers—darn 'em agin—does a dreadful deal of mischief they do; for often when a gentleman like yourself, now for instance, doesn't meet with success quite so soon as was promised, and as he on keerce anticipated, he begins to despair, and to suspect the management, and to repent his bargain—and eventually he backs out of the consarn, whereas had matters been fairly represented, and proper patience—and perseverance—and capital exercised, the despairin' Adventurer might ha' tumbled into a second Maria. Misser Editor, 'ee know as well as I do that nothin' human can't alter Natur's fixed and immutable Law which be that no successful issue shall be attained but by perseverin' patience—and judiciously employed capital—and proper skill: these combined seldom fail to reward the Adventurer, but for any body to say that a Mine 'ill become rich without 'em, and is agoin' to throw up her riches to grass without bein' worked—it's all stuff Misser Editor, and contrary to Natur. Just intimate my sentiments to these friends Cap'n Middleton, or whoever 'un be, for though as 'un will see by my style of orthography I be a plain unwashed Cornishman, my ideas aint to be despised I can tell 'ee.

But I be aserd of trespassin' too much on there columns at once, and will bring my letter to a conclusion. There be several other matters I want to tell 'ee on, but as I intend goin' home to-morrow, havin' had quite enough of there smoke Misser Editor—and there fogs—and there mud—and the Brokers—darn 'em agin for the last time—I'll write 'ee again some future time. Wishin' 'un a happy new year, and hopin' 'un will do there best to give as correct prices of shares in your list as possible, I remain, &c.,
 London, Jan. 20th, 1851. TIMOTHY TRIBUTE.

WEST SHEPHERD SILVER-LEAD MINING COMPANY.

The adjourned two-monthly meeting of adventurers was held at Manchester, on the 14th inst.—W. SUNDELAND, Esq., in the chair—a short notice of which appeared in the City Article of the Journal of Saturday last, in which the item "interest and commission, 57l. 12s. 10d." should have been a balance at the National Bank to that amount, making the total to the credit of the company 68l. 19s. 4d. The following are the accounts more in detail:—Capital account, 1994l.; calls, 552l. 10s.; received towards expenses of deputation in 1849, 27l. 3s. 9d.; sale of ores, 357l. 5s. 2d.; interest, 7s. 6d.—2931l. 6s. 6d.—By labour cost, 1601l. 11s. 9d.; general expenses, 158l. 7s. 9d.; office ditto, 191l. 6s. 8d.; machinery, 126l. 5s.; lord's dues, 22l. 8s.; merchants' bills, 468l. 7s. 1d.; dividend, 243l. 14s. 7d.; T. Smelt's disallowed acceptance and expenses, 50l. 5s. 9d.; leaving balance at National Bank, 57l. 12s. 10d., and in purser's hands, 11l. 6s. 6d. A call of 1s. 6d. was made, and it was resolved that, the defalcation in payment of calls having been found very detrimental to effectually working the mine, after this date all calls in arrear, or made at any bi-monthly meeting, which are not paid by the next two-monthly meeting, the shares on which such calls are due shall be declared forfeited.

The report, dated Jan. 6, from the mine agent, stated that a good lead lode had been cut into in the 32 fm. level west, and on the 13th it was stated as still producing good stones of lead, and improving. Driving had commenced at the bottom of the east shaft, in the 20 fm level, and in about 6 fms. the copper lode is expected to be cut good, as in the 12 fm. level it was large and very kindly, with fine samples of ore. Upon the whole, the prospects are represented as satisfactory.

WEST DOWNS CONSOLIDATED MINING COMPANY.

At an adjourned meeting of adventurers, held at the Queen's Head Hotel, Tavistock, on the 13th January,—Mr. JOSIAH SIMS in the chair,—the captain's report was read, and the accounts and vouchers to the 31st of December last having been presented, it was agreed that they be allowed and passed, subject to the absent vouchers for December being produced at the next meeting.

The statement of account having been examined, a call of 10s. per share was made. It appearing from books, that Mr. G. Thomas, holder of 186 shares; Mr. P. N. Johnson, 64 shares; the representatives of the late Mr. G. L. Hollingsworth, 50 shares; and Mr. Alfred Weatherhead, 40 shares, had not paid any costs of the mine since the call made in October, 1848; and other shareholders having been threatened by creditors of the company, the purser was authorised to take the necessary measures for having the affairs of the company administered by a Master in Chancery, unless the arrears of calls, together with one now made, be paid within 14 days from this date; and that Richard Robins, Esq., solicitor, and a Master Extra in Chancery at Tavistock, be recommended as the official manager.

It having been reported by Mr. Robins (the purser), that a vexatious action had been commenced by the East Crowndale Mining Company against himself, Capt. Carpenter, the agent, and Mr. Diamond, for an alleged illegal distress for rent, and in respect of their endeavours to protect the property of this company in the burning-house, it was agreed—"That this company hereby undertake to indemnify them against all loss, costs, charges, damages, and expenses arising therefrom."

It having been reported that a considerable amount of property belonging to this company had been forcibly removed and carried to the East Crowndale Mine, at Rix Hill, under the direction of Capt. R. Williams, the agent of the East Crowndale Mining Company, and that the burning-house had been partially destroyed, and serious damage, committed by order of the said R. Williams, whereby one of the covenants of the lessees of these mines with W. Courtenay, Esq., the lord of the manor, had been broken, and the mines become liable to forfeiture in consequence thereof, it was agreed—"That this company do take legal proceedings for recovering compensation for the property so removed and injury committed, and that counsel's opinion be taken as to the most advisable mode of proceeding to obtain that object."

British enterprise in the universal pursuit of mining in California, is now, we are informed, likely to be legitimately carried out by a company, under the denomination of the "British Mutual Mining Company." Accounts which are published on the arrival of every American packet ship, announce the fact that importations of gold at New York, and other commercial cities, are increasing largely in amount; and the report of the Times correspondent, dated San Francisco, Dec. 1, states that in the month of November only \$4,337,000 in gold were, according to official manifests, shipped from that port. In the same report, very favourable returns are given of the state of trade, the nature of the climate, and of adaptation of the soil to even an exuberant productive-ness. The increasing prosperity of the mining districts is also attested on the same authority; which at the same time accounts for that fact, by the disclosure that machinery is now in general use for the triturating and amalgamation of the precious metals.

HOLLOWAY'S OINTMENT AND PILLS THE BEST REMEDY TO CURE BAD LEGS.—Eliza Dew, the wife of a farm servant living at Dinton, near Salisbury, suffered several months with a sore leg, the ulceration of which was so dreadfully obstinate that it defied the skill of eminent medical men to abate its malignancy. When in its worst state, she commenced using Holloway's ointment and pills, which soon produced favourable appearances, and by persevering in their use for a short period, she can now boast of a sound cure. There is no case, however obstinate, bad, or long standing, but may be cured by these admirable medicines. Sold by all druggists, and at Professor Holloway's establishment, 244, Strand, London.

A Compendium of British Mining.

BY J. Y. WATSON, ESQ., F.G.S.

No. IV.—THE SYSTEM OF CORNISH MINING.—(Continued.)

The ores, or, as the miners term them, *hures*, are all dressed by women and boys, who cob them, pick them, jig them, buck them, buddle them, and spall them, as they may require; but as these terms of art may not be altogether intelligible, the process may be described in humbler words.* In order to prepare *copper ores* for market, the first process is, of course, to throw aside the *deads*, or rubbish, with which they are unavoidably mixed; and this operation is very cleverly performed by little girls of seven or eight years of age, who receive 3d. or 4d. a day. The largest fragments of ore are then *cobbed*, or broken, into smaller pieces by women; and, after being again picked, the whole is divided into—1. Prills, or lumps, of ore.—2. Dradge, or ore mixed with other substances.—3. Halvans, hennaways, or leavings, which contain but a small quantity of ore. The prills are given to what the Cornish miners term *maidens*—that is, to girls from 16 to 19 years of age. These maidens *buck* the ores—that is, with a bucking iron, or flat hammer, they bruise them down to a size not exceeding the top of the finger, and this portion of the ore is fit for market. The dradge, when containing but little iron pyrites, is *bucked* to a smaller size than the *prills*, and then jigged, either by machinery, by little boys, who shake them in a sieve under water. By this means it is separated into four parts—1. That which passes through the sieve, and is usually fit for sale, called *hutchwork*.—2. The portion at the bottom of the sieve, called *bucked and jigged*.—3. The middle part of the contents of the sieve, which is again *bucked and jigged*.—4. That at the top of the sieve, which is put among the *halvans*, or refuse. Some of the ores of copper are so soft, that exposure to water would occasion loss, in which case they are fit for the market, after being sifted, cobbed, and picked. The *halvans*, hennaways, or leavings, are the refuse from the preparation of the *crop*, and, when not much mixed with iron pyrites, those portions which contain the greatest quantity of ore are *bucked and jigged*; but when mixed with foreign substances, of great specific gravity, they are *cobbed* and *picked*. The portions that contain but little ore are *stamped*, and the *stamped work* is *trunked*; the larger particles of the *trunked ore* are *tyed*.

The dressing of *tin ores* is altogether a different process, because not only are the ores perfectly different, but the method of smelting them is also so different, that it is necessary the tin should be reduced to the finest powder, while copper ore is smelted in small lumps. The tin ore, after being picked, and separated from the *deads* by vanning, is thrown into a stamping-mill, where it gradually falls under a number of piles, or beams, of wood, shod with iron, which are worked vertically up or down—generally by a water-wheel. As it is necessary that the ore should be bruised to a very fine powder, the bottom of the stamp is surrounded by a very fine copper sieve, and water being made constantly to flow through this, the ore can only escape when it is fine enough to pass with the water through the interstices of the sieve. It then settles into a very fine mud, which is composed of metallic particles, and powdered quartz-rock, &c. This mud undergoes a very ingenious process, which the miners term *buddling*. The metallic, and other particles, are all of different specific gravities; and the dresser, being aware of this, places the mud at the top of an inclined plane, and gently working it about, allows a small stream of water to run over it. In a short time the inclined plane is all equally covered with the mud; and although, to any person who has not been brought up to the business, the whole mass has the same appearance, yet the dresser is able to distinguish, and to draw a line between, the heavy metallic particles which have remained at the top of the inclined plane, and the worthless ones which, from being lighter, have been washed towards the bottom. After separating the one from the other, the worthless part is thrown away, and the metallic part buddled again, and the process is repeated until the mass retained consists almost entirely of metallic particles. But these particles, which are as fine as flour, are not all tin; generally many of them are composed of mundie (the sulphuret of arsenic); others are copper; and as the difference between the specific gravities of these three metals is not sufficient to separate them by buddling, or washing, it becomes necessary to roast the mass—an operation which the dresser does not himself perform. As soon as the mass is placed in a furnace, and subjected to a proper degree of heat, the sulphuret of arsenic goes off in white poisonous fumes, or smoke, and the specific gravities of the different particles of copper and tin are so altered by the action of the fire, that upon being taken out of the furnace, and again delivered to the dresser, he finds that, in the course of carefully buddling the mass on the inclined plane before described, the particles separate—the tin, which is the heaviest, being left upon the upper part, while the copper is at the bottom. The tin is then packed in bags and sold; and, being nearly pure metal, it requires, in comparison to copper ore, so little fuel, that it is all smelted in Cornwall.

Whoever compares together the two processes of dressing copper and tin ores, must be satisfied that they are completely different affairs; and in Cornwall, accordingly, it is perfectly well understood that they form different trades. The ores are so dissimilar, and require such different modes of treatment, that the experience which the labourer gains in dressing the one is of no possible use to him who dresses the other. It is true, that both sets of people are called *dressers*, but it does not follow that, for that reason, they can all dress *anything*; and to desire a copper dresser to dress tin ores would, in Cornwall, be considered as preposterous as if one were to send him to Aldersgate-street to dress a turtle, or to St. James's-square to dress a duchess.

But it is time that the *underground captains* should come to grass, and that the whole body of subterranean labourers should be released; and those who have attended to their labours throughout the day will scarcely regret to see them rising out of the earth, and issuing in crowds from the different holes or shafts around—hot, dirty, and jaded—each with the remainder of his bunch of candles hanging at the bottom of his flannel garb. As soon as the men come to grass, they repair to the engine-house, where they generally leave their *underground clothes* to dry, wash themselves in the warm water of the engine pool, and put on their clothes, which are always exceedingly decent. By this time, the *maidens* and little boys have also washed their faces, and the whole party migrate across the fields in groups, and in different directions, to their respective homes. Generally speaking, they now look so clean and fresh, and seem so happy, that one would scarcely fancy they had worked all day in darkness and confinement. The old men, however, tired with their work, and sick of the follies and vagaries of the outside and the inside of this mining world, plod their way in sober silence—probably thinking of their supper. The younger men proceed talking and laughing; and, where the grass is good, they will sometimes stop and wrestle. The big boys generally advance by playing at leap-frog; little urchins run on before to gain time to stand upon their heads—while the "maidens," sometimes pleased and sometimes offended with what happens, smile or scream, as circumstances may require. As the different members of the group approach their respective cottages, their numbers of course diminish; and the individual who lives farthest from the mines, like the solitary survivor of a large family, performs the last few yards of his journey by himself. On arriving at home, the first employment is to wheel a small cask in a light barrow for water; and, as the cottages are built to follow the fortunes and progress of the mine, it often happens that the miner has three miles to go ere he can fill his cask. As soon as the young men have supped, they generally dress themselves in their *holiday clothes*—a suit better than the *working clothes* in which they walk to the mines; but not so good as their *Sunday clothes*—in fact, the *holiday clothes* are the *Sunday clothes* of last year; and thus, including his *underground flannels*, every Cornish miner generally possesses four suits of clothes.

The Sunday is kept with great attention. The mining community, male and female, are remarkably well dressed; and as they come from the church, or meetings, there is certainly no labouring class in England at all equal to them in appearance, for they are naturally good-looking. Working away from sun and wind, their complexions are never weather-beaten, and often ruddy; they are naturally a cheerful people, and, indeed, when one considers how many hours they pass in subterranean darkness, it is not surprising that they should look upon the sunshine of the Sabbath as the signal, not only of rest, but of high and active natural enjoyment.

To show the great advance in the system of mining, the following extract, from a communication made to the Royal Society in 1671, is exceedingly curious.—(Phil. Trans., vol. 6, page 2087). After describing the steps which were taken, in order to discover lodes, the writer proceeds—

When we have found one lode, the last assay hatch (costeasing pit) exchanges its name

for that of a *tin shaft*, or *tin hatch*, which we sink down about a fathom, and then leave a little long square place, termed a *shamble*, and so continue sinking from east to east—i. e., as high as a man can conveniently throw up the ore with a shovel—till we find either the lode to grow or degenerate into some kind of wild, as *mundie*, or *masky*, &c.; then we begin to drive east and west, as the goodness of the lode or convenience of the hill invite, which we term a drift, 3 ft. over and 7 ft. high; but, in case the lode be not broad enough of itself, then we usually break down the *deads*, first on the north side of the lode, for the greater convenience of the right arm in working, and then we begin to rip the lode itself. The *beetemes* rip the *deads* and ore; the *shoremen* carry it off, and land it by casting it up with shovels from one shamble to another, unless it be when we have a winder with two kibbles (great buckets, made like a barrel, with iron hoops, placed just over the then termed *wind hatch*), which, as one comes up, the other goes down. When we are come at any depth, and find the water begin to annoy us, we descend to the bottom of the hill, when we have that convenience, and at the lowest place begin a little drift on a level, till we come up to our work; but when we once pass that level on which our adit runs, and the water begins to trouble us, we have this remedy—either with winder and kibbles, or leathern bags, pumps, or buckets, to get it up to the adit level, and so we are informed to do to the very top, when we have not the convenience of an adit. [To be continued in next week's Mining Journal.]

PURIFICATION OF NOXIOUS VAPOURS.

Fig. 1.

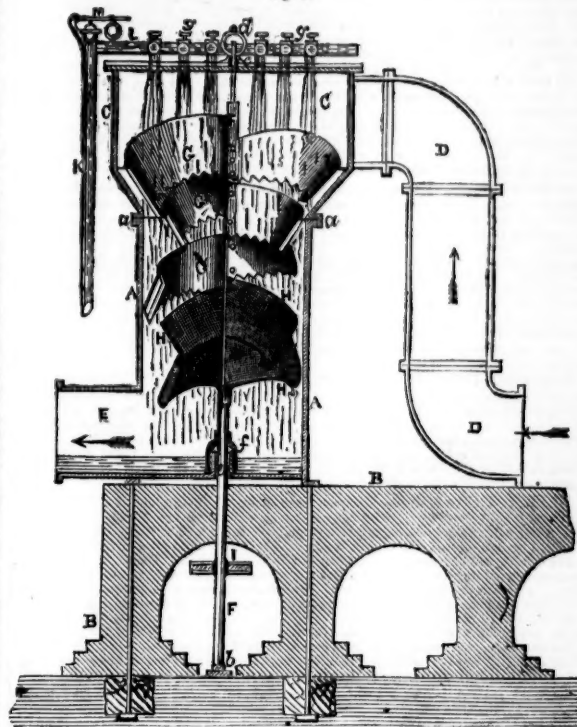
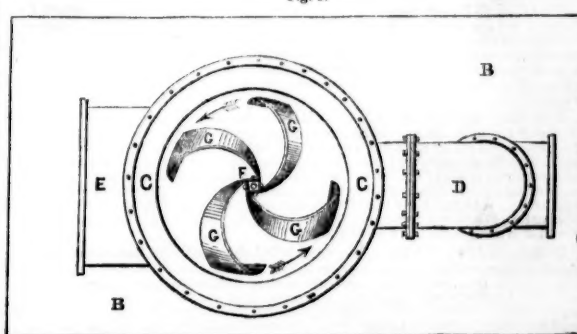


Fig. 2.



Many plans have at various periods been suggested for the avoidance of the intolerable nuisance arising from different chemical operations when conducted on a large scale; but few have been brought into general use, either arising from their complexity, inefficiency, or injurious interference with the manipulating apparatus to which they have been applied. We have lately inspected an arrangement of machinery, invented by Messrs. Rodham and Hoblyn, of Stepney, whereby the gases, or noxious vapours, arising from chemical, mineral, or metallic works, the smoke from steam-engines or other furnaces, and other aerial and volatile products, are effectually condensed and purified; while the condensed substances are rendered commercially available for the manufacture of various pigments and other useful appliances. This apparatus, which is simple in construction, and which, from the experience obtained by the operation of a working model on a large scale, the patentees are satisfied beyond their expectations will prove in all cases thoroughly efficient, will be fully understood from the following description, illustrated by the above diagrams—Fig. 1 is a vertical section, and Fig. 2 a plan view of the apparatus. A, A, is a cylinder, which may be constructed of boiler-plate, or it may be built of brickwork, lined with cement, or other substance—such cylinder being securely fixed to the floor, or base, B, B, built on arches, which will allow sufficient room for a man to have easy access to the gearing apparatus, to do any work required thereto. C, C, is a conical top, firmly bolted to the cylinder, A, A, by flanges, or other means. D, D, represents the ascending flue communicating with the furnace, or vapour generator, as the case may be; and E, E, the escape passage through which the permanently volatile gases pass to the atmosphere, purified from all condensable matter. F, F, is an upright shaft, passing through the bottom of the cylinder, A, A, resting in the bearing, b, and working at the top in the stuffing-box, c, furnished with a hollow cup, d, for oil or other lubricating matter. At f it works in a piece of tubing, which reaches above the surface of the water, to prevent its escape into the gearing work beneath—the arrangement being the well-known hydraulic joint commonly used. Upon this shaft, F, F, are securely fixed a series of peculiarly-shaped blades, or fans, G, G, which are bent, curved, and twisted in such manner as to form a revolving screw, with a downward exhausting action—the upper ones being concave, as well as curved downward, somewhat in the form of the bowl of a spoon, twisted and notched, or jagged on their bottom edges. The lower slides of the series, H, H, are formed of strong wire-work—the meshes of which are about 1 in. or 1½ in. super-fices. I, I, is a band pulley, which may be fixed at any convenient part of the shaft, F, in the arch beneath, or it may be propelled by bevelled wheels, or other means of gearing from the prime mover; so that the speed of the revolving shaft can be regulated at pleasure, as it will sometimes be required to cause the blades, or fans, to rotate at a much higher velocity than at others. K is a water supply-pipe from a cistern above, or from a force-pump, to which is connected an elbow pipe, L, armed with injection taps, g, g, g, penetrating the conical top, C, C; and M is a safety-valve to the supply pipe, to prevent it bursting, should the pressure upon it be greater than the discharge. The escape passage, E, which is level for a considerable distance, is constructed with a number of pits, or hollows, for receiving the condensable matters which have not settled in the cylinder, from which they may be removed through openings above, furnished with air-tight covers, or other suitable means. The fumes, gases, or smoke from a furnace, or chemical works, entering the conical top, C, C, being the largest part of the cylinder, A, A, have room for considerable expansion, in which state they come in contact with the downward streams of cold water, by which they are contracted, the condensable parts mechanically separated, and the whole forced rapidly downwards by coming in contact successively with the solid and network blades, by which process they are cut, separated, and washed, depositing the solid and li-

* A Glossary of Mining and Smelting Terms is published, in a neat pocket-size, at the Mining Journal office, 36, Fleet-street; it may be obtained of any bookseller or news-vender, price 2s.



quid substances in the bottom of the cylinder, and the pits in the outlet, &c., while the permanently elastic vapours escape into the atmosphere. The patentees submit the invention to proprietors of large manufacturing, chemical works, &c., with the utmost confidence, as a means of not merely effecting the abolition of those nuisances which frequently destroy vegetation, poison cattle, and injure the health of the inhabitants of the district in which such works are situated, but of converting the evil into a source of profit, by rendering the condensed matters a mercantile commodity. Another important application of this apparatus is to the furnaces of steam-boats, when the unsightly and huge funnels may be dispensed with, and the engine-room and cabins rendered pure and healthy.

Mining Correspondence.

BRITISH MINES.

ALFRED CONSOLS.—We expect to resume the driving of the 80 fathom level, east of Field's engine-shaft, on Wednesday or Thursday next. In taking down the north part of the level in the 70 fms. level, east of said shaft, we think it is a little better than when last reported; the whole of the level may be valued at from 500 to 600 per fm. Four of the men that were driving this level have been employed in taking down the piece of level referred to, and the remaining four are rising over said level, for the purpose of communicating to the winze sinking under the 60 fms. level, west of Wyld's shaft. The level in this rise on the south part, which we are rising on, is 6 feet wide, worth from 800 to 1000 per fm. The stopes over the said level are quite equal to the last report—viz., 1500 per fm. In the winze sinking under the 60 fathom level, west of Wyld's shaft, the level is quite as good as last reported, worth quite 1500 per fm. There is no change to notice in any other part of the mines since the last report. We hope, in a fortnight or three weeks from this time, to be in a regular course of working, having been for the last fortnight altering and fixing pitwork, and repairing some of the damages done by the explosion of the boiler at the steam-whim.

BARRISTOWN.—The ground in the cross-cut is somewhat changed, being more favourable for driving, and is a very pretty clay-slate or killas stratum, with branches of spar, prisms, and gossan, all of which is of a promising character, and I cannot but consider, from all circumstances connected with the cross-cut, that it is a good speculation. The men have commenced the course of the slide; it is making a regular wall, and there are some small leaders inclining towards it, containing small portions of lead. No doubt, when we get a few fathoms from the old lode, there will be a change of some kind in the slide, and I hope for good. It should be borne in mind, that should this level be continued it will prove a twofold object—first, if the slide will prove productive, as it did east of the old lode; and, in the next place, it will prove if the counterpart of the old lode wrought on will be found in the direction we are driving. It is fair and reasonable to make such a trial, as it was this slide that destroyed it in its regular course.

BEDFORD UNITED.—The south part of the lode in the 115 fms. level, east of the engine-shaft, is producing good stones of ore, and the north part is spotted with ore; altogether the lode is promising; in this level, east and west of Andrew's winze, there is no alteration worth noting. The lode in the 103 fms. level east is still a good course of ore—being 4 ft. wide, and yielding 10 tons of ore per fm. In the 90 fms. level east the lode is 2 ft. wide, and yielding 10 tons of ore per fm. In the 80 fms. level, in this level, the lode continues 3 ft. wide, and is worth 10 tons of ore per fathom. There is no alteration in the ground in the 47 fms. level north.

BERRIOW CONSOLS.—We have been engaged during last month in clearing the adit on Budge's lode, and find small bunches of copper ore of excellent quality, with fluor. &c. Such ore is rarely seen so shallow, being under 10 fms. from surface. We shall be gaining backs by driving west, perhaps 40 fms. back, by a drive of 50 fms.—this driving will also assist us in fixing where to sink a shaft. There are other lodes near, one containing some ore just under the surface, which can be tried at small expense, by a cross-cut from Budge's lode. We have been waiting to purchase the whim and other materials left by the former adventurers, before we commence sinking the shaft on the main lode (which is down 20 fms. to the adit). There is ore ground both to the east and west of this shaft, going down under adit. We have now got possession of the materials, and hope, as the ground is very good for sinking, to get down 10 or 12 fms. quickly, and then drive east and west to cut the ore. We also propose driving the adit on this lode westward into the hill, where we shall soon have high backs.

BIRCH TOR AND VITIFER.—There is an improvement in the 30 fathom level, west of the old engine-shaft; also in the 30 fathom level, west of Dunstan's shaft, where the two branches have formed a junction; the lode is now a good size and regular, and is producing tin, but not rich. The other parts of the mine are without alteration; the north lodes have not yet been met with in the cross-cut adit.

BODMIN CONSOLS.—The ground continues good in the engine-shaft for sinking. We are now down about 13 ft. below the 13; we shall sink 4 fms. deeper, and then commence to drive to cut the lode, which I hope to reach by the middle of March. From the appearance of the ground, I should say we are almost sure to cut a good lode in the 25 fms. level. The lode in the 13 north is much improved; we have some splendid stones of lead; the lode in this end looks well; the 13 south is poor. I have been obliged to suspend the winze, in consequence of so much surface water coming down.

BODMIN WHEAL MARY CONSOLS.—In the adit level we have set two pitches at 10s. in 12, the term of Hoskins's pitch having expired. In the 10 fms. level No. 1 lode is not yet cut; No. 2 is a kindly lode, but has very little mineral in it; No. 3 lode, which did not make ore in the adit level, has branches and fine stones of bell metal ore throughout in the 10 fms. level; this lode will set upon tribute as soon as the winze now sinking on No. 4 lode is holed—we cannot put more men in this level at present, for want of air. We commenced to drive on No. 4 lode on the 23d inst.; this is a very fine lode, and we expect when we get under the ore part of the lode to find it productive. The shaft is going down in a beautiful killas.

BORRINGTON PARK.—We have holed the shaft, and have nearly completed the pit, and have cut through the lode, which is from 4 to 5 ft. big. The leader, which is from 18 in. to 2 ft. big, is composed of silver-lead, munda, and spar, giving clear work. We are now going to sink a shaft, which was put behind us in clearing the level, and bring the level in as deep as possible to the bottom of the shaft, when we shall have about 11 fms. of backs. We shall commence driving east with all force in a day or two. One pair of men are engaged in securing the adit level, and another pair driving on the course of the lode. The masons will get the walls of the smith's shop up in the course of another week.

BOSCARNE.—The lode in the 10 fms. level, where the peach course came in, is looking splendid, 2 ft. wide, and excellent work. I had a stone brought to the counting-house, a few minutes since, more kindly than solid lead, considering where it came from. This course is standing to the north of us in the 20 fms. level, and the course we are now driving on shows good work for lead; we have not driven an inch in the 20 fms. level east and west without mineral, and this level is only 15 fms. from the clay. I think the great deposit of lead is under the peach course, though the 20 fms. level west is looking kindly enough to produce an abundance of lead at the 30 fms. level. I must confess I have the greatest confidence in meeting with a gulph of ore under the peach course; the fact is, I am sure it is there. The stopes in the 10 fms. level are looking famous. We have put the men belonging to the 20 fms. level west to rise in the back of the level, to communicate with the 10 fathom level; the 20 end is showing lead in the flooken part of the lode; also we intend to drive east a few fathoms more, and then cut through the lode, which is about 12 feet wide. We have had three samples of the lead ore assayed, which have produced 73, 75, and 76 per cent. for lead, and one of the samples yielded 38 ozs. of silver to the ton. The copper has been assayed, and produces 26 per cent. for copper, and worth 17s. 5s. per ton.

BRIDFORD CONSOLS.—The great lode in this mine, consisting wholly of barytes, has been cut through, and found to be at least 40 ft. wide. On its eastern side there is a flooken course, as at Wheal Adams, which having proved very troublesome at that mine for driving in, we have preferred commencing on the western side. We are gaining backs fast as we drive north, and expect soon to meet with a canter lode of a very promising nature, intersecting the level above. When this has been seen, we will drive on a little, we shall be better able to decide on the best place for an engine-shaft. The nature of the great lode appears exactly the same in our mine as in Wheal Adams, and we know of no reason why it should not prove equally productive; we, therefore, recommend that a steam engine be erected, either at the junction of the above two lodes, or in such other situation as the result of the workings now in progress shall indicate as preferable. An east and west lode, of a very kindly nature, has been discovered near the other two, containing lead in an adit 10 fms. under the surface. This adit is to be continued on the course of the lode eastward, where the ground rises rapidly, and will very soon intersect the canter lode mentioned above; and also, about 40 fms. further, a north and south lode, hitherto seen only at surface. The gossans from our great lode have been tried, and found to produce 11 ozs. of silver per ton.

BRYN-ARIAN.—The 10 fms. level, west from the engine-shaft, is still disordered and poor; we have had a new stop in the back of it to four men; since the winze has been communicated from the level above, the lode is large, and will yield about 10 cwt. of ore per fm. The stop in the back of the deep adit level west will produce from 10 to 12 cwt. of ore per fathom. The wheel at Penarn is finished, and we are now putting up the ladder. Although the weather has been very rough, we should have had the wheel working before this had the pumps been here. We have heard from the captain of the vessel, who says he was obliged to put back again into Plymouth, in consequence of the roughness of the weather. We have about 12 tons of ore at surface, from 2 to 3 ft. of which are clean.

BUTTERDON.—The engine-shaft is sunk 30 fms. from the surface; the ground is a little stiffer than when last reported. Six of the shaftmen are employed to cut ground for bearings and clatters, to fix plunger and lift; the other six to drive a cross-cut to intersect the lode, which is now driven 2 fms.; the ground is favourable for driving. The water is still increasing. The rate the engine is working is 12 strokes per minute, principally coming from the cross-cut. If the lode continues its regular underlay, as we have seen it in the trial shaft, the cross-cut will be about 5 fms.

CARTHEW CONSOLS.—I had hoped to have had ore to report of the engine-shaft sinking sunk to the 85 fms. level, but the cause of it is not being so has in late communications. I presume, been sufficiently accounted for; however, the men making fair progress now. In the north end, 75 fms. level, the lode continues a very good one; the lode in the south end at this level, though far from bad-looking, does not show so well as when last reported on, from a small cross-course having disordered it. We have a good lode in the south end 65 fms. level, and also in the winze (south) in the bottom of the 48 fms. level, which is being sunk some fathoms in advance of this end. The tribute pitches are very characteristic of what they were when last noticed.

CWM ERFIN.—There is a little ore in the engine-shaft, but lode small. The 30 fms. level east is yielding 7 to 8 cwt. of ore per fm. The stop over this level is still looking very well. The 20 fms. level east has a little ore in it, and the ground harder. The stopes over this level yield 12 cwt. of ore per fm. About 17 tons of ore were broken in the last month.

CWMYSTWITH.—Soft ground has been met with in the 36 east, which has cut out the lode. In the bottom of the 30, the length of ore ground on all the lodes is about 70 fms., which will give a good mine, if found in the 40 fms. level. A lode has been cut in the 30, north of Pugh's shaft, 6 in. wide, 2 in. very good ore. In Kingleid adit level the lode is 5 ft. wide, ore throughout, but not of sufficient value to take away.

DAREN.—We have decided upon and commenced to drive an adit under Francis's adit; this will give a back of about 25 fms. to the ore ground in Francis's adit and level Coed. We have also arranged for the steam-engine, and are getting stone for the house; this will enable us to drain and draw the stuff from the great old workings to the westward, and thus bring the whole of ore ground into operation. The ore ground yet discovered pays very well. We are slowly pushing level Coed westward through

atle, and shall be able to make greater progress in a few days, after making the necessary preparations. Everything is going on in this mine, and is fully bearing out all our expectations. We will call the new adit, Oliver's adit, by way of distinction. The series of levels are as follows:—Top adit, or level Ushat; middle adit, or level Canal; third adit, or level Coed; fourth adit, or Francis's level; fifth, or Oliver's adit.

DEVON AND COURTENAY.—The lode in the 60 end is upwards of 4 ft. wide, but poor; in the 60 west the lode is about 2 feet wide, producing occasional stones of ore, and the ground a little more easy. We have in the 40 a lode 18 inches wide, with a little ore throughout, and a branch of ore of as rich a quality as any one would wish to see; and, from present appearances, I am inclined to think it will soon enlarge. We have not taken down the lode for the week, neither shall I do so for a few days to come, as I wish to save the lode clear. The No. 3 lode, by the great elvan-course, discovered west of the I H shaft, was overtopped by the elvan, and disordered, and caused us some trouble to find; we shall sink on this lode as soon as the weather gets better. I have set some men to work on our No. 4 lode (the Rix Hill lode), and I have good grounds for believing we shall have as good a lode here as the Rix Hill adventurers have there.

EAST DAREN.—The 20 fms. level will now yield full 3 tons of silver-lead per fm.; but the water is at present quick and troublesome in this end. The winze from the 10 fms. level is also in rich ore. The 10 fms. level east is also looking at present quite as good as the 20 fms. level; the lode is 4 ft. wide, and ore throughout. Taylor's shaft is down 7 fms. 4 ft.; the lode is large, but soft, and without much ore. About 13 tons of ore were broken from the two levels and winze in last month.

EAST SHARP TOR.—I regret to have to inform you that there has been a delay in the sinking of Hitchens's shaft since my last, in consequence of the late excessive rain having increased the water so much as to prevent the sinking with the present sized lift. However, I hope, after a few days dry weather, we shall be enabled to resume the sinking with all possible good effect, and with the present pit work.

EAST WHEAL LEISURE.—In driving the 10 fms. level cross-cut from Taylor's shaft, a lode or branch has been cut, 18 in. wide, containing copper, jack, and munda; a very kindly looking thing for the north lode. The ground is good, and both the north and south lodes are expected to be cut in about a week from this time.

Jan. 21.—The cross-cut south from the 17 fms. level has cut a branch 6 in. wide, containing yellow ore and malleable copper, the foot still south. The 17 fms. level west is yielding half a ton of ore per 12 days; the same cross-cut north has, in the last 7 feet driving, passed through a succession of branches, varying in size from 6 to 20 in., composed of soft spar and good stones of ore. The winze from the adit level, on the north lode, is yielding good stones of ore. The adit level east, on south lode, is still in a soft channel of white killas, lode 3 feet wide, of good gossan, spotted with ore, though not more than 6 fms. from surface. The adit level west, on Taylor's lode, is yielding three quarters of a ton of ore per fm., lode 3 ft. wide. The same level east is suspended, being very shallow.

EAST WHEAL REETH.—Jan. 16.—We are clearing up very fast in the shaft, and this morning our men fell in with the cross-course, which is in the eastern end, about 5 fms. under the 10 fms. level. I broke some of it, to see whether there was any tin in the lode, and when tried, to my surprise, it worth 16s. per barrow. Now, or for what reason, the last agents let such a lode stand I cannot conjecture, for there is not an inch of ground driven on it from the shaft. To-morrow I will send you a sample tried to-day, that you may see for yourselves.

Jan. 17.—In my letter of yesterday, I promised to send you a sample of the tin found in the shaft, which I now enclose. I broke some from another part of the lode to-day with the same success; where the ground is fair there is the best tin, and where it is hard it is not so good; however, it is a fine lode. We are still clearing up the shaft, and driving the 10 fms. end. The shaft is in good condition, and does not require any timber.

EAST WHEAL RUSSELL.—Hitchens's engine-shaft has been sunk 7 ft. below the adit level; the lode is still looking splendid, with gossan, quartz, peach, prisms, and capel, of the finest description, indicating large quantities of copper ore, which I think we shall have before we get to any great depth. We are getting on with our engine-house, &c., as well as can be expected, but the weather is much against us. The walls will be up by the latter part of this week.—Jan. 22.

ESGAR LLEE.—The lode in the 12 fms. level, east of Morgan's winze, is much improved since my last; in fact, it never had a more promising appearance in this level from the surface than at present, and will yield 1 ton of ore per fm. In the deep adit, east of Morgan's winze, we have cut another slide; we had a good stone of ore hove to the clay, but as yet we have not seen the lode east of the heave. The stopes, on an average, are much the same in appearance as in my last, yielding about 1 ton of ore per fathom. We shall sample 20 tons of lead ore on Thursday.

GREAT WHEAL SHEBA.—On entering this mine, I saw a long deep water-course had been excavated, to carry away the water after it had passed over a 50-feet wheel; in this water-course a lode has been discovered. I cannot state the width of it, because it was covered over with timber. However, I saw about one kibbelful of lode stuff thrown up by the slide, composed of capel and munda, spotted with pale yellow copper ore, of low produce, but of a fine quality. I saw no sign of any lead. A perpendicular shaft is in course of sinking, which will take this lode about 20 fms. below the surface. About 200 fathoms west from this place a level has been driven into the side of a hill, about 50 fathoms on the course of a parallel lode, about 40 fms. south of the above-mentioned lode; this lode is 6 feet wide, composed of capel, abundance of munda, blende, and yellow copper ore; and a small quantity of gossan had been raised from the back. This level being driven several years ago, and the blue vitriol water issuing from the vein, has caused a green tinge over the surface of the rock, which makes it look much more valuable than it really is. A large heap of stuff has been raised from this large lode, and placed on the dressing floor, and it is partially dressed. A small portion of it may be made saleable; but the major part of it is of no service but to mend the roads. However, though there are no riches discovered, it is a fair speculation; and I would recommend an extensive development. An engine-shaft is in course of sinking to intersect this lode at a required depth.

HEIGNSTON DOWN.—Owing to an increase of water in the winze sinking below the 45 fms. level, we have suspended the sinking thereof for a short time, but shall resume sinking the same as soon as practicable. The lode in the 45 fms. level is worth from 2 to 3 tons of good quality ore per fm. The lode in the 35 fms. level is improved since last reported, producing at present some good saving work for copper ore. There is nothing of importance to notice in the other points of operation.

HENNOCK.—We have been disappointed in having the pumps, which will delay our commencing to sink until Friday, or, perhaps, little will be done in the shaft until the beginning of another week. We have cut through the lode at the 20 fms. level, and find it to be about 14 ft. wide, containing in the eastern side spar of rather a hard nature, with good spots of lead in it; and on the western part principally white iron and gossan, and have good work for lead, and much softer, which will be sure to make a very productive lode in going down. As soon as the shaftmen have fixed the lift, &c., I shall put the men to drive north, and on the western part of the lode.

HOLMBUSH.—The ground in Hitchens's engine-shaft, sinking below the 120 fms. level, is more favourable than it was—we think 2 fms. will be sunk through this month. The ground in the 132 fms. level cross-cut south, towards the shaft, is also favourable, and we are pushing on both places as fast as possible; we shall resume the driving of the north cross-cut, as soon as the large lode, and placed on the dressing floor, and it is partially dressed. We are getting on with our engine-house, &c., as well as can be expected, but the weather is much against us. The walls will be up by the latter part of this week.—Jan. 22.

KESWICK.—At Brandy's 10 fms. level rise is worth 15 cwt. of lead ore per fm. The 10 fms. level stop is worth 8 cwt. of ore per fm. In cutting off the side of the salt level, in order to work the salt sump more efficiently, we cut through a bunch of ore, worth about 10 cwt. of ore per fm. At Brandy's we have got through the vein, but there is no alteration in the appearance of it, which still looks well; ore worth about 3 cwt. per fm. At Thornthwaite, the 11 fms. level is worth 20 cwt. of ore per fm.; the 17 fms. level south, 4 cwt.; No. 1 stop, 8 cwt.; bottom level rise, 6 cwt.; and the bottom level, 12 cwt. of ore per fm.

KIRKCUDBRIGHTSHIRE.—At Stewart's shaft, the lode in the 74 fathom level end west is 3 ft. wide, worth 6 cwt. of lead to the fm. At Gilpin's shaft, the lode in the 62 end west is 3 ft. wide, yielding 7 cwt. of lead to the fm. The lode in the 50 end west is unproductive. The lode in the 40 end west is 4 ft. wide, with good stones of ore occasionally.

LLWYNMALEES.—The water being in the 14 fms. level, since last report we have done nothing under the 8 fms. level. In the western winze sinking under the 8 fms. level we have still a very good lode, but not quite so good as last reported. The stopes over the 8 fms. level, from 11 to 26 fms. west of western winze, look a little better. We have gone through a strong lode in the cross-cut, 20 fms. west of western winze, and have proved by it that the north and south lodes are approaching to a junction a few fathoms further west than the end of the 8 fms. level. The lode in the 8 fms. level is still more promising than last report—the end is now getting wet. The engine has been working very well, at the rate of from 10 to 11 fms. per minute, but it has been consuming a vast quantity of coal. I trust we shall soon receive the 100 tons of coal ordered, as I cannot at Aberystwyth get better coal than we are using. We are forking the water in the 14 fms. level but slowly, having so much water to contend against after the repeated floods, and until we get the 12-inch plunger in the 8 fms. level, we cannot calculate upon being clear of water at all times.

NEW COPPER BOTTOM CONSOLS.—We are still driving on the great east and west lode, which is now 10 ft. wide, and going still wider and better as we get off from the great cross-course.

NORTH WHEAL BULLER (OR GREAT SOUTH TOLGUS).—We hope to complete the diagonal shaft from the 40 to the bottom level shortly, when we shall bring to alter our pitwork in the perpendicular, and prepare for sinking under that level on the course of the lode. The 60 fms. level west is very much improved in appearance during the last week; the lode is now in two parts, with good stones of ore on each side, and we expect they will concentrate in extending westward, and as it is in a good channel of ground we may calculate on its being productive; the 60 fms. level east is but little altered since our previous report. The 50 fms. level west, although of a promising nature for several weeks past, has not become productive yet; from the favourable ground and the appearance of the lode in it, we have no doubt it will improve. The 40 fms. level west has been opening very promising ground during the last two months; the end is at present poor, but it was so in the level over just at this point; we have risen about 5 fms. in the back of this level; the lode in rising has been small, with spots of ore, but nothing worth saving; the rise in the 40 fms. level east, on the north part of the lode, is up about 4 fms., the lode continues its full size (about 1 1/2 ft. wide); and is composed of jack, munda, and copper ore in the spar, and has a kindly appearance. The 30 fms. level west has been communicated to Noel's shaft; the lode in this level has been intersected by a cross-course, which for some fathoms considerably damaged it; it is now, however, taking its regular bearing on the western side of it, and is again producing good stones of ore, and promises soon to be better. We have set a pitch in the back of this level at 3s. 6d. in 12, but the lode is not looking so well as when we set it, but it is still of a very promising

appearance. We are driving a cross-cut north from Noel's shaft in the 30 fms. level; it is in good ground, and we expect to cut Buller north lode in a few fms.; this cross-cut is to intersect the south lode, and also the cross-cut south in the 20 to intersect the south lode. The lode in the adit level, or north lode, continues large, about 2 ft. of it is composed of munda and capel, with a horse of killas, and the other side a branch about 6 in. wide, containing a leader of copper ore; they appear at present to be forming distinct lodes in going west.

NORTH WHEAL ROBERT.—In our adit level the lode is 3 ft. big, with stones of ore; and, from the indications of the strata of ground, I am inclined to think that at a few fathoms deeper in the hill, leading towards the engine-shaft, we shall have a good lode. Our open cutting is not going on as fast as I could wish, in consequence of so much rain. We are obliged to timber it over the men, and arch close after them; for 2 fms. deep, we are obliged to blast. I hope, before the next report, that the men will be sinking Murchison's engine-shaft. Halke's shaft is timbered up, and is suspended for the present. Next week I shall be engaged in taking out bob-pit and wheel pit, in readiness for the large wheel.

OLD WHEAL BASSET.—An improvement is reported in the adit level west, on Paul's lode, which is 14 inches wide, producing good stones of ore, with a more kindly appearance than hitherto, and widening in the end. The red lode, in the level driving west of new shaft, is producing equally as good, or rather better, work than when first cut in the shaft.

PEN-Y-BANK AND ERLGLODD.—The lode in the adit level, west of the cross-cut, is much improved since last reported—is 4 ft. wide, and producing good stones of ore. We have cleared up Pen-Y-Bank shaft to the bottom, which is about 30 fathoms from the surface—here we find a level extended east 27 fms.; the greatest part of the back has been worked away to the surface; the lode in the present end is from 2 to 3 ft. wide, with small branches of ore. There is still an old working under this level that is said to be 7 fms. deeper than the bottom of the shaft, which we are now clearing up.

PENZANCE CONSOLS.—Our north lode is very promising; we have set one pitch to six men for 8s. in the 12, and one to six men for 8s., and four pitches besides, on the north lode, at from 12s. to 15s. in the 12, and we find the lode still improving. Other parts of the mine are looking well, and we doubt not that we shall be able to put more men to work than I spoke of in my last report, by the time I then mentioned. On the whole, we never looked so well as we do at present.

Jan. 20.—The lode in the 24 fms. level west is still looking very kindly, which we have hoped for a short time. We have a winze coming down from the 18 to the 24 fms. level, which we expect to hole in a few days, and it will enable us to set a pitch to six men, on tribute, on good tin ground; and then we shall drive our 24 fms. level west, with all possible speed; in the 24 fms. level east, we have a good lode of tin. Our pitches on tribute are looking well. In the 18 fms. level east we have a paragon tribute. On the north lode we have discovered a good branch of tin, in the north wall, going behind the old works—it appears at present that it will produce a quantity of tin. In the cross-cut the ground is hard. I hope soon to have the pleasure to inform you that we have cut the south lode, as it appears by the bunches of tin that we are very near the lode.

SOUTH TOLGUS.—The engine-shaft is sunk 2 1/2 fms. below the 54 fms. level, and the ground is favourable. The 54, east and west, is at present in poor ground. The 42 east will produce 2 1/2 tons of ore per fm. Youron's lode will be reached by the cross-cut from the 42 in about three or four weeks; the 42 west has a little ore. The 32 west produces 1 ton per fm. The 22 east, on Youron's lode, has been driven on an unproductive branch; a cross-cut will be driven north to cut the ore part, which is yielding in the winze from the 12 half a ton per fm. The 12 east, on south lode, has improved, and contains black ore, gossan, and spar; the 12 fms. west, on north lode, yields 1 1/2 ton of ore per fm.; the 12 east half a ton per fm. In the adit east the lode is 2 ft. wide, producing half a ton per fm., and much improved in appearance. The prospects of the mine, as regards returns and profit, are represented as being very satisfactory.

SOUTH WHEAL TRELAWNY.—We are still continuing to drive south on the branch we cut in the eastern cross-cut at the 60 fms. level, with six men. The ground is not quite so favourable as last mentioned; also the lode is split in branches at present, but it appears they will intersect each other again in cutting in: it is composed of killas, barytes, with crystals of copper ore, and munda, and capels. The water is just the same as last reported.

TRELEIGH CONSOLS.—Christie Lode: In the 100 fathom level, west of Garden's, the lode is 1 ft. wide, but little ore. In the 93 fms. level, west of ditto, the lode is 18 in. wide, worth 6 ft. per fm.; in the stopes above this level the lode is 2 feet wide, worth 14 ft. per fm. In the 80 fms. level, west of cross-cut, on the north part, the lode is 1 ft. wide, not much ore. In the 70 fms. level, west of Garden's, no lode taken out this week.—Parent Lode: At Parent engine-shaft, below the 53 fms. level, we are sinking in the country. In the 52 fms. level, east of ditto, the lode is 18 in. wide, with stones of ore. In the 30 fms. level, east of ditto, the lode is still in disordered ground.—Middle Lode: In the 40 fms. level, east of cross-cut, the lode is 15 in. wide, but not much ore. In the rise above the 41 fms. level, west of cross-cut, the lode is 1 ft. wide, with stones of ore. At Burgess's shaft, from surface, we are sinking in the country for the middle lode.

TRELAWNY.—From the extraordinary wetness of the season of late, and from unavoidable causes in Wheal Mary Ann and Trehan, as well as here, consequent thereon, Trelawny engine-shaft has not been sunk much for several weeks past, as we have noticed in our reports; we are, however, now taking steps to overcome such difficulty for the future, by fixing a lift in Smith's shaft from the 55 fathom level, so that the engine there may take up the water to the surface, instead of running back to Trelawny engine, at that level, which work we are pressing forward with all speed, and after it is completed, no doubt, we shall get on as usual. The lode in the 93 end, north of Trelawny shaft, is 3 feet wide, worth 8 ft. per fm.; in the south end, same level, the lode is 3 1/2 ft. wide, worth 9 ft. per fm. In the 82 north the lode is 3 ft. wide, worth 10 ft. per fm. in the winze in the bottom of this level the lode is 2 1/2 ft. wide, worth 10 ft. per fm. In the 72 north the lode is 3 1/2 ft. wide, worth 9 ft. per fm. At the north mine, Smith's shaft is sunk 4 fms. 3 ft. below the 55 fms. level, and still in good ground. In the 55 end north the lode is 2 ft. wide, worth 7 ft. per fm. In the winze in the bottom of the 40, north of the shaft, the lode is 2 ft. wide, worth 6 ft. per fm. In the 68 end, north of Trehan, there is no alteration in the lode. We have nothing new to remark in the stopes.

TRELOWETH.—During the past week they have cut a flat branch in sinking the engine-shaft below the 32; one of the stones of ore from this branch accompanies the report, and proves the rock or country to be strongly mineralised. The cross-cut south, towards the main lode and Perpondy's lode, in the 32, has been driven 18 ft.

TREVISKEY.—The lode in the 260 fms. level, east of Michael's shaft, is 3 ft. wide, producing stones of ore, and has a promising appearance. The lode in the 248 fms. level is 18 in. wide, yielding 2 tons of ore per fm.; the lode in the winze below this level is yielding 6 tons of good ore per fm.; the stopes in the bottom of this level are producing 4 tons of ore per fm., and the stopes in the back 6 tons per fm. The lode in the 246 ft. wide, yielding 1 1/2 ton per fm. The lode in the 93 end, north of Trelawny, is 2 1/2 ft. wide, worth 8 ft. per fm.; in the south end, same level, the lode is 2 1/2 ft. wide, worth 9 ft. per fm. In the 82 north the lode is 3 ft. wide, worth 10 ft. per fm. in the winze in the bottom of this level the lode is 2 1/2 ft. wide, worth 10 ft. per fm. In the 72 north the lode is 3 1/2 ft. wide, worth 9 ft. per fm. At the north mine, Smith's shaft is sunk 4 fms. 3 ft. below the 55 fms. level, and still in good ground. In the 55 end north the lode is 2 ft. wide, worth 7 ft. per fm. In the winze in the bottom of the 40, north of the shaft, the lode is 2 ft. wide, worth 6 ft. per fm. In the 68 end, north of Trehan, there is no alteration in the lode. We have nothing new to remark in the stopes.

TYWARNHAYLE.—The 90 fms. level east is improved again, and now produces 7 1/2 tons of good ore per fm. The 80, west of railroad shaft, is yielding 4 tons per fm. The stopes in the back of the 70, east of Taylor's, are looking well.

Jan. 22.—The 90 fms. level east continues good, yielding 7 1/2 tons of ore per fm. The 30 west of railroad shaft will yield 4 1/2 tons per fathom of ore of better quality than it has ever yet produced, and looking very kindly. All other bargains much the same as last reported. The next sampling will be about 600 tons—produce about 6 per cent.

UNITED MINES (TAVISTOCK).—The improvement in the Rix-hill lode is within 40 fathoms of the boundary of this set, and passes through it for nearly a mile; the lode in which the discovery is made can be worked from the present engine-shaft, which is 90 fms. deep, and the 20 fms. level in our mine is considerably deeper than the 40 fms. level, which is the Rix-hill lode, in the Rix-hill lode the discovery is made in the 20 fms. level, and the lode in this winze will produce between 2 and 3 tons per fm. The lode in the 224 and the 209 fms. levels is unproductive. The lode in the 212 is 18 in. wide, yielding 2 tons of ore per fm. In the 260 cross-cut south we have met with two branches, each containing a little ore, and expect to meet with a lode in driving on, as the water is coming from before the end. The lode in the 40 fms. level, at Williams's, is small and poor. We sampled 485 tons of ore on Wednesday, the 15th inst., and expect to raise about the same quantity for the next two months. We are not at present doing anything in the Barrier.

WELLINGTON.—The lode in the 50 fms. level, east of the engine-shaft, is 2 ft. wide, producing some rich stones of copper ore, a very promising looking lode; we expect, ere long, to see a course of copper ore in this level. The lode in the 42 fms. level, east of Parcolly shaft, is 2 1/2 ft. wide, worth for copper ore and tin 40s. per fm. The lode in the 10 fms. level, west of the western winze-shaft, is 1 ft. wide, composed of munda, lead, and copper ore, promising for a better lode at a deeper level. In the western adit we are driving north. In the cross-cut driving north in the adit level, towards Fisher's lode, we have cut a lode, and can see it (2 1/2 ft. wide), and the north wall is not yet seen; so far as we have seen it, we think it will produce from 12 to 15 ft. worth of tin per fm. this we call something good. In sinking the shaft under the shallow adit, for Fisher's lode, the lode came in the shaft last Wednesday, and from it there has been broken some good copper ore, and may be valued at 10 ft. per fm., but it cannot be sunk deeper until

WEST WHEEL JEWELL.—The 70 fathom level, west of Williams's cross-course, on Wheel Jewell lode, is worth 67. per fm. Carkeek's winze, sinking below this level, on the same lode, is unproductive. The 57 fm. level, west of Hodges's cross-course, on Tolcarne tin lode, is worth 54. per fm.; in the 57 fm. level east, on same lode, is unproductive. The shallow adit, driving west of Tregouing's shaft, on same lode, is worth 61. per fm. The stopes in the bottom of 12 fm. level, east of Tregouing's shaft, on same lode, are worth 127. per fm.; the stopes in the bottom of 12 fm. level, west of Tregouing's winze, on same lode, are worth 217. per fm.

WEST WHEEL TOWAN.—The lode has been cut through in Caroline's shaft; it is 13 in. wide, producing good work for tin. In the adit level west, on Wheel Tye, the lode has improved; it has been small for some time, but is now 15 in. wide, producing good work for tin, and looking very promising.

WEST WHEEL VIRGIN.—We are sinking the engine-shaft by nine men, and we are now down 8 fms. 4 ft. under the 9 fm. level, with a good lode of tin still going down; the last 3 fms. sunk in the shaft was worth 77. per fm., and the lode improves as we go down. We have a good branch of tin in the 9 fm. level, west of the engine-shaft, all in whole ground, and in this ground we are likely to raise abundance of tin when the water abates. We expect to be working on several more lodes about March or April.

WHEEL ADAMS.—In the 72 fathom level we are driving south under the flookan, and the eastern wall of the lode, which is leady, and letting down much water. We purpose to drive about 9 ft. more, and then cut into the lode, which will, no doubt, effectually drain the 60—ground is favourable for driving. In the 60 about 4 ton of copper ore has been taken from the pitch, directly over which lead has again made its appearance, and the tributaries are raising some good work. The rise in the black ground, west of the quartzose lode, is producing granular galena, containing 24 ozs. of silver in 20 cwt. of the ore. The rise in the 50, in the same kind of ground, is producing stuff of moderate quality, but it is not so good for silver as the ground below. The stopes in the 40 north are producing about 12 cwt. of lead per fm.; the cross-cut in this level is being driven in good ground, and favourable for lead. In the 28 we have intersected the lode, but have not yet cut through it; the part cut into (about 20 inches) is most favourable, and more productive than any part of the lode we have before seen to the north of the old engine-shaft; the lead is of good quality (a specimen of which I enclose), but we refrain from giving the value of it per fathom, until we reach the western wall, immediately after which we will give you its value to the best of our judgment. This is a most important feature, and a point we look at with more than ordinary interest, the lode here being under the elvan, and in all probability will turn out a good thing. In examining the backs we find that the old level has been driven beyond our thing. In the 28, and this level is to the west of the cross-cut, it is quite clear it has end about 7 fms., and this level is to the west of the cross-cut, it is quite clear it has been driven on a small vein, and not on the lode, which cross-cutting only proves. At Aller we have this day cut into an east and west vein, containing mundaie and spots of yellow copper ore of good quality—the lode is not yet cut through. The stamping engine we expect will be at work on Saturday next for trial; the other apparatus will be got in order for proper working in the course of a fortnight. We purpose to sample a parcel of lead, computed at 50 tons, in the course of the week.

WHEEL CREBOR.—I have great pleasure in informing you that the cross-course named in my last, met with in the adit, or 54 fm. level, west of Rundle's, is nearly 12 ft. wide, of a beautiful conical character. The lode cut at the western side, as far as yet opened, is about 2 ft. wide, composed of black and yellow copper ore, mundaie, soft quartz, and peach, a very promising lode. By every appearance of the cross-course and lode, with the change that has taken place in the kilns, there is every reason to expect good results from this part of the mine. The other parts of the mine are without any material alteration. Our setting day is on the 25th inst., the results of which you shall have in due time.

WHEEL HAMLYN.—We have a great quantity of mundaie now in the caunter lode, and also black jack, with rich spots of yellow ore.

WHEEL MARY.—At Wheel Mary lode, since our report of the 16 Dec. we have done but little in the 100 fm. level west, in consequence of the men having been engaged in taking down a part of the lode east, where we find it to produce 4 tons of ore per fm. In the 100 fm. level west, the lode is 7 feet wide, producing 3 tons of coarse ore per fm. In the 90 fm. level west, the lode is 6 feet wide, producing 4 tons of ore per fm. No. 2 winze and Moor's shaft, both sinking below the 50 fm. level, are suspended in consequence of too much water. In the 80 fm. level west, the lode is again forming itself under the slide; the lode is 2 ft. wide, but poor. In the 70 fm. level east, the lode is still small and poor. At Parent lode, in the 50 fm. level west, the lode is 15 in. wide, producing 2 tons of good ore per fm.; we have driven this level west from Parent shaft about 50 fms. without ore, until within the last 3 fms. driving. At the middle north lode, the men are still rising against Campbell's shaft in favourable ground. We have 18 pitches working at an average tribute of 10s. 7d. in 17. We sold on the 26th of Dec., 100 tons 9 cwt. of copper ore, which realised 42s. 7d. in 3d., and on the 30th inst. we expect to sell about 75 tons.

WHEEL MARY ANN.—There has not been anything done in the 70 fm. level, on Pollard's shaft, since my last report, the men being hindered by water, in consequence of breaking the main shaft, and a great increase of water, owing to the heavy rains. The lode in the 60 fm. level, south of the shaft, is 2 ft. wide, and worth 107. per fm. The lode in the winze sinking under this level is 3 ft. wide, and worth 117. per fm. The lode in the 50 fm. level is 2 ft. wide, and worth 87. per fm. The lode in the winze sinking under this level is 2 ft. wide, and worth 97. per fm. The lode in the 40 fm. level south is small and unproductive. The lode in the 70 fm. level, south of Barratt's shaft, is 4 ft. wide, and worth 127. per fm. The lode in the winze sinking under the 60 fm. level, south of the shaft, is 3 ft. wide, and worth 107. per fm. The stopes throughout the mine are usually productive. We sold this day two parcels of ore, No. 1, computed at 88 tons, at 20s. 18d. per ton, and No. 2, 93 tons, at 3s. 6d. per ton.

WHEEL MARY EMMA.—We have not made that progress since the last meeting as was expected, in consequence of the ground being harder, when the lode was also less productive; but we are now in a more favourable stratum of ground for tin, and I am proud to tell you, the lode has not only improved, but the tin is holding down, and likely to continue, and from the present appearance, the bottom stopes will pay all the costs of the mine. For the present, I would recommend that the same number of men be employed where they now are, and four more men be put to sink the shaft on the top of the hill, in the bottom of which the lode is very promising indeed, being 1 ft. 6 in. wide, producing good stones of tin, of the same character as in the deep adit level; when the end of which is driven under this shaft, it will be upwards of 30 fms. from surface, and lay open a large quantity of tin ground for stoping; the stratum is a beautiful kilas, and the shoots of tin in the mine, dipping west towards this conical ground, is a good indication. I have no doubt the sinking of this shaft would be a good one for tin, and materially enhance the value of the property. Our dressing department has been impeded by the late rough weather, but we shall have 2 tons of first-rate quality tin ready for market by the end of the month.

WHEEL MAY.—I have just seen the engine landed at Plymouth; and I intend to remove it to the mine on Thursday. No exertion shall be wanting to get the engine at work as speedily as possible; for I feel very anxious about it.

WHEEL PENHALE.—From the plenitude of water, caused by incessant rain, we are driven at present from further progress in sinking the engine-shaft, and have again returned the men to the 40 fm. level east, where the lode is much improved; in it there is a leader of lead about 6 in. wide. In the north end, same level, the ground and lode are also much improved. In my communication, three days since, I intimated that the caunter lode in the winze had so much improved as to be worth 402. per fm., but the improvement found since in opening up it north and south, augments its value to from 504. to 607. per fm. The tribute pitch looks well.

WHEEL PROVIDENCE (SOUTH SYDENHAM).—The lode in the adit end east continues as last reported, and we are progressing with all possible dispatch with the buildings.

WHEEL SARAH (St. Kew).—We have commenced sinking the shaft, and have sunk 9 ft., and cut the main lode, which is 18 inches wide, producing good stones of lead, and looking very promising; I will forward you a box of the stones of lead this week. By reason of the lode producing so much water, I am obliged to abandon sinking the shaft, and have commenced another shaft 6 fathoms to the west, and think to cut the lode at a 10 or 12 fm. level, and I believe there is no doubt but that we shall have a good lode of lead in this level. The best plan now is to put three more men to work in the shaft, and sink as fast as possible; and to remove the flat-rods at once, so as to stop the shaft-work as little as possible.

WHEEL SARAH.—I have forwarded you a box of the stones of lead broken from the back of the lode in the 70 fathom level, south of the old engine-shaft. It was reported that this mine was worked, about six years ago, that they cut the lode in this valley; but it was not so. What they saw were the branches we cut, and thought might have been the lode split up; but it proves not to be so. The lode is 18 in. wide, and very promising; and I think there is no doubt but that this valley will turn out a great quantity of lead, and make a good mine. I was obliged to abandon sinking the shaft where the lode is cut, in consequence of so much water, and have commenced sinking a shaft 5 fms. to the west, so as to take the lode at the 10 or 12 fms. depth; and I hope we shall not have so much water in this one, as we shall be obliged to sink our shaft 4 fms. in depth before we can get the lift.

WHEEL TOM.—Charles Gunn and his partners have completed their contract in forming the communication with the new and old adit on the south tin lode; to-morrow I intend to put them to sink on the tin lode in the bottom of the adit level, which place the intended shaft will sink; there is a leader of wolfram, with some grains of tin gone down, from 10 to 18 in. wide, and wolfram is the forerunner of tin, and the leader being so strong, I do verily believe the lode will be a good one for tin speedily, as the ground or strata the lode is in is red and white kilas, and no more than 25 fms. from the Kitt Hill range of granite, which is altogether congenial for abundance of tin. Our costaining on the great tin lode towards the bottom of the valley has been this week sparing, owing to the heavy rains we have had here; I will send stones of tin and the component parts from this lode on Thursday by the luggage train. Our lobby same as above, with regard to stoping, and now we have it there at a very little distance from the point where it will intersect our main north and south lode, carrying much lead with it. Under these circumstances, we halt it as the harbinger of almost certain success in our main lode. We intend to intersect the main lode by a cross drift in the 30 fm. level, which we hope to accomplish in about two months from this date. In conclusion I beg to state that our ground below the caunter lode is easy, but firm and compact, and it will not require much timber, and our prospects of a good mine continue to be most satisfactory.

WHEEL VENTON.—Since the last general meeting we have continued sinking the shaft, but owing to rather a bad accident which occurred on the 1st of Dec. last, we have not made the progress we otherwise should have done, but we have sunk 28 fms., and intersected a caunter lode about 4 ft. wide, carrying some good branches of silver-lead with it, and spotted with this metal throughout; this lode had been long known to run through this set, having been partially wrought on in the adit known until it accidentally came in our engine-shaft, and now we have it there at a very little distance from the point where it will intersect our main north and south lode, carrying much lead with it. Under these circumstances, we halt it as the harbinger of almost certain success in our main lode. We intend to intersect the main lode by a cross drift in the 30 fm. level, which we hope to accomplish in about two months from this date. In conclusion I beg to state that our ground below the caunter lode is easy, but firm and compact, and it will not require much timber, and our prospects of a good mine continue to be most satisfactory.

WHEEL VINCENT.—Since our last report we have not been able to do much underground, on account of the water being in the mine. We have dressed a 7-in. lift this week by the side of the other lift, and set it to work yesterday, which will enable us to keep the water out easily; the lode still continues to be regular, about 4 feet wide, and very rich for tin, and the more we open of the lode the better appearance it has. We are now about to commence sinking a small shaft on the back of the west and east, and also to draw up the work. As it is likely we shall have a great quantity of good work to bring up through this shaft, we shall commence stoping the backs after this shaft is down. We have already gone over 53 fms. of good tin ground, which is still lengthening

as we extend our level west. Our present appearance is very good, and I hope, when we get in the 20 fm. level, we shall be able to raise 10 tons of tin, where we can now raise 2 tons. It still appears that the best of our mine is further west, as we are getting near the great caunter lode from which the streamers have taken up a great quantity of tin, and worked it as deep as they could go for water. Of late we have been visited by several mine agents, who very much like the appearance of the mine, and within the last fortnight three mine sets have been taken up west of us on the same lodes, and calling them after the name of Wheel Vincent.

FOREIGN MINES.

COPIAPO MINING ASSOCIATION:—

Copipo, Nov. 26.—COPPER MINES—CHECO.—In the 30 fm. level the lode is large, giving rich stones of copper ore, and bids fair to lead to a good bunch. In the 20 fm. level the lode is also large, having a bunch of from 18 to 20 in. wide, of superior class ore. In the 12 fm. level we continue to break some excellent quality ore. The stopes continue to yield well, and our prospects are a little improved.

SAN PEDRO.—In my last I informed you of our commencement of stoping away the backs. During the present month these stopes have continued well, and at present we have a branch, 12 in. wide, of 30 per cent. ore. Our operations here are rather confined, having but few hands employed.

LA COMPANIA.—In the 18 fm. level, now being driven to the east of the new shaft, the lode is 3 ft. wide, interspersed throughout with ore, but not enough to produce a great quantity that will pay for shipping to England. In the winze in the bottom of the 10 fm. level the lode is large, producing some good quality ore, and we have great hopes, as we get down, that it will further improve. In the 10 fm. level east we have done but little during the present month, for the want of men. We have commenced sending the ore from this mine to the port of El Estero for the company's troops.

LA ESTERIA.—In the shaft the lode continues to improve as we proceed in depth, and I believe, in a very short time from this, we shall have one of the best courses of ore in Chile. When we commenced this shaft our lode was composed of gossan and crystallised iron, with now and then a stone of ore. At present the gossan is passing away, and we have deposits of 50 per cent. ore, and every fathom we sink we are expecting to come down upon a bed of ore. Our progress is also retarded, on account of the scarcity of men.

FLAMENCO—SAN AUGUSTIN.—In the adit level west we have a very large lode, composed of gossan, with a branch on the north wall 18 in. wide, of 25 per cent. ore. In this level we have formed a communication with the workings of a former party, and we are now preparing to take away some of the ore. In the shaft, now down about 8 fms., we have a large lode (the size of which I cannot say, for we have no wall), composed of gossan, and just now beginning to give rich stones of ore. Our object here is to get down to a 12 fm. level, and to drive a cross-cut both north and south through the lode, where we expect to find the same run of ore that we have in the lode above. I would further observe, that this level is extended in entirely new ground, with the exception of a few pits being sunk on the back, and from each of which good ore has been broken; but, as I have before said, we intend proving the whole run, by driving this level into the hill, and there appears to be very little doubt of our being amply remunerated for the outlay.

SAN CARLOS.—In this mine our operations have been confined to the driving of our two upper and lower levels, in each of which we have a large lode, producing a small portion of ore; but here also, I have before informed you, our object is to get into the hill, where we had a good bunch of ore gone down; and this will take us several months to do. We have not done so much work in the past month as I could wish, having employed the men in the port in the discharge of the vessel with provisions from Valparaiso.

Produce for October:—Checo 25
" " San Pedro 10
" " La Compania 10
" " La Reyna 8
" " San Augustin 9—62 tons.

SILVER MINES—AL FIN HALLADA.—In the 5 fm. level the lode is from 1 ft. to 14 in. wide, producing ore of about 200 mcs. the cajon. In the 10 fm. level the lode is 2 feet wide, and although not broken down, has the appearance of being very good. In the 15 fm. level the lode is also 2 ft. wide, a very good bunch of ore. In the 20 fm. level the lode is split into branches; and in the 25 fm. level we have a good lode, 18 in. wide. Every one of the chiflones below the lode, although not rich, is looking well, and we are at every breaking expecting a fine course of ore. In the labor to the north the lode is still large, one foot of which is of good quality. I also beg to call your attention to the adjoining mine, named Salvador, whose principal workings are not 5 fms. from this, and from which they are raising some beautiful ore of very rich character. What I said last month regarding this mine I again repeat, that I have never seen her looking so well.

SAN JOSE DEL CARMEN.—Our operations here are confined to the driving of three levels, each of which produces a little low quality ore. We are, however, daily looking out for an improvement, and hoping soon to get it.

MERCEDITAS.—In the 25 fm. level the lode is 16 in. wide, composed of spar and soft prun, giving tin and then a small portion of silver. In the bottom chiflon the lode is 1 ft. wide, principally composed of quartz, with sprigs of silver. In the upper chiflon the lode is large, and I think shortly it will be rich, for we are getting very near some cross bunches, which we may fairly expect will alter its character.

CARMEN ALTO.—In the 16 fm. level the lode is 2 ft. wide, giving little or no silver, still it has a favourable appearance. In the chiflon the lode is large, composed of quartz and prun, with a little silver ore—this lode holds fair promise of doing well.

SANTA ANA.—In the chiflon to the north the lode is 9 in. wide, giving occasional stones of metal, interspersed with "roacher," or ruby silver. In the chiflon going south it has precisely the same character; we have in the past month taken out some good quality ore.

COLORADA.—Our expectations here are high, having in the bottom of the mine a beautiful lode, 18 in. wide, composed of quartz, prun, and clay, precisely the same as in the adjoining mine, Salvador. In each of the levels, both north and south, the lode is 18 in. wide, and of such a character as I think cannot fail, ere long, of becoming productive. This mine will certainly be one of the first in the mineral.

DESCUBRIDORA DE ORO.—In the bottom level the lode is 6 in. wide, giving stones of copper ore. In the upper level the lode is 1 ft. wide, producing also good stones of copper ore. In the chiflon the lode is 4 in. wide, saving work for gold. The other parts of the mine are without alteration.

In concluding this report, allow me to say that the property here continues to increase in value, having, as we shortly shall, a direct communication with the port of Flamenco. We shall get our provisions comparatively cheap, with easy transit for our ores, and what is of considerable importance, water for the troop (at this time we have several Englishmen sinking wells); when this work is complete, with the daily increasing value of the mineral, we cannot fail to do well—time and perseverance only being wanted to develop it.

LINARES MINES.—The following has been received from Mr. H. Thomas:

Linares, Jan. 11.—The men in the engine-shaft have cleared up the fork, caused the pulley and cisterns, and commenced sinking under the 31 fm. level, in ground moderately fair for progress. Wilson's shaft is progressing favourably, and at present contains a lode worth from 4 to 5 tons per fm. The 55 fm. level, driving west of San Anton winze, and towards Wilson's shaft, is, I am happy to say, considerably improved, and at present worth 4 tons in a fm. You will see by the section in your possession, that this level is being driven into ground untouched, under the 45; and if it continues good, as we expect from the productiveness of Wilson's, we shall lay open a very considerable extent of ore ground. The 55 fm. level driving east is without much change containing occasional stones of lead, but we are expecting a speedy change for the better as we approach the extensive run of ore worked partially by the late proprietor under the 45 fm. level. The 31 fm. level, also driving east of Shaw's shaft, contains a lode worth 1½ ton in a fm. Shaw's shaft, sinking under the 45, is without alteration; and the cross-cut towards San Juan shaft, and the engine-shaft in the 45, are advancing favourably. The tribute pitches are turning out very well.

Ore in stock at Linares, Jan. 4, 227 tons 15 cwt.; weighed in, Jan. 11, 37 tons—remaining at Linares, 264 tons 15 cwt.; at Seville, 78 tons 12 cwt.; at Malaga, 59 tons; at Baylen, 2 tons 9 cwt.; on board ship, 43 tons 8 cwt.—Total stock, 448 tons 4 cwt.

NATIONAL BRAZILIAN MINING ASSOCIATION:—

Cocoes, Nov. 12.—At Hamilton's stopes there is still a large party employed in rising westerly, in precisely the same manner as when last reported. The lode here presents a most promising appearance, and some specimens have been found during the past 10 days. Cocoes produce from Oct. 24 to Nov. 13:—Mks. 7 5 13

ROYAL SPAIN MINING ASSOCIATION:—

Cobres, Dec. 23.—Poreveancia.—Thompson's shaft is developed 6 feet below the 32 fm. level; the lode is from 2½ to 3 ft. wide for about 4 ft. in length; the remainder is small and poor, yielding 4 tons of ore per fm. The stratum is greenstone, but not so compact and hard as it ought to be; west from the shaft, at the 22 fm. level, the lode and veins are in a disordered state, occasioned by a small slide; it is from 8 to 9 feet wide, interspersed with veins of variegated copper and arsenical pyrites—the latter in abundance; the bottom part of the said level is more free from arsenic, and it will yield 4 tons of ore per fm. From the shaft, at the same level, the lode is from 3½ to 4 ft. wide, yielding 4 tons of ore per fm. The 19 and 22 fm. levels I communicated to the latter level, and the men are placed to stop east of the said winze; the lode is from 2½ to 3 ft. wide, composed of gossan and iron pyrites, interspersed with particles of black and grey ore, but not worth saving. In the course of a fortnight we hope to effect a communication with the adit excavating west from Goldsmith's shaft. The lode in the winze east from the shaft, developing between the 10 and 22 fm. levels, is not looking so well as when last reported; it is in a disordered state, and from 6 to 7 feet wide, interspersed with yellow copper and arsenical pyrites, yielding ores of a coarse quality, at the rate of 2½ tons per fm.; west from the shaft, at the 10 fm. level, the lode is in a disordered state, interspersed with veins of yellow copper and arsenical pyrites; the lode in the stopes west from the shaft, between the adit and 10 fm. levels, and east from No. 2 winze, is from 2 to 3 ft. wide, composed of black and grey oxide, yielding 3 tons per fm.; the lode in the winze east from the shaft, developing between the adit and 10 fm. level, is 2 feet wide, producing the same quantity of ore as hitherto, yielding 1½ ton of ore per fathom. West from Goldsmith's shaft, at the adit level, the lode is 3 ft. wide, composed of particles of green carbonate and black and grey oxide, but not worth saving.

New Feabilla. The adit, excavating in a westerly direction, has not yet intersected the lode; and as the men were required to develop Thompson's shaft, it is suspended for the present.

San Joaquin.—Taylor's shaft is developed 6 fms. below the deep adit; the water does not appear to increase, and there is no alteration in the strata since last reported. In the deep adit, excavating west and south of the shaft, we are encountering a powerful stream of water, which appears to lessen it very materially in Taylor's shaft; from the indications, we presume there is a lode not far distant from the present end—the stratum is favourable.

Angelia. We have just intersected the north part of the lode, and the men are placed to fix a piece of railroad, which will occupy at least a fortnight, after which we shall commence to excavate the lode—the matrix is favourable.

ST. JOHN DEL REY MINING ASSOCIATION:—

Morro Velho, Nov. 8.—Produce for October 20614 oits., equal to 198 037 lbs. troy, from 5325-6 tons of ore, yielding 3-27 oits. per ton. Considering how much our stamping was affected during the month of Oct., by the falling off in the needful supply of water, I am much inclined to think that the daily returns of stone consumed by the stamps has been over-estimated; but, even assuming them to be correct, it becomes evident, on comparing October with the two nearest preceding 31-day months—say, July and August, that the deficient supply of water has caused a falling off in the quantity stamped—say, of 167 tons, as compared with July, and of 147 tons as compared with August. Another cause of our diminished produce is the deteriorated quality of the stone. In the Bath this deterioration will, I trust, be only temporary; and, as explained in my last, a month or six weeks ought to produce an improvement, when the north branch near the gut shall have been completely laid open; but, in the cachoira, through not so bad as it had been three or four months ago, it is to be feared that the deteriorations will be of a more permanent character.

Stamping during the month averaged 92-43 heads. The supply of stone has been abundant, enabling us to throw out the rather annual quantity of 673 tons; but

you may judge of the poverty of the stone, when you see that after having been picked to so large an extent, the remainder has yielded only 3-87 oits. per ton.

Cost for October, Rs. 46,635 or. £ 3388 0 0
Produce 20,614 oits.
Less duty 1,031
Net oitavas 19,583, at 7s. 8½d. 7517 0 4

Profit £ 1979 0 4
The diminution of profit is occasioned partly by the temporary falling off in the produce, partly by October having to bear the two months' duty, commission, &c., at Rio, and partly by some peculiarly heavy items under the head of materials—viz.: iron pipes, chain, stationary, &c.—making, together, 5226 rs., out of which the second and third items are not likely to appear again for some time; and, lastly, to the increased rate of exchange.

New Stamps.—I am straining every nerve to push these forward, in the hope of getting them to work if possible by the 1st of January; but we have been so grossly thrown back by the want of force, that I now begin to apprehend we may not get to work before the latter end of January.

Morro Velho, Nov. 18.—Gold extracted to date, 7516 oits., from 392-76 cubic feet of sand (result of 10 days' stamping), yielding 19-13 oits. per cubic foot. Stamps 17 days, average 93-96 heads. The supply of stone continues abundant, and the quality, during the first 10 days, more than usually good; though, I am sorry to say, that, since then, a change for the worse is but too susceptible.

The gold remittance, consisting (after payment of 5 per cent. duty) of 39,730 oits. = 281-889 lbs. troy, in eight boxes, each containing 4965 oitavas, is to start for Rio early to-morrow (the 19th).

MINING NOTABILLIA.

[EXTRACTS FROM OUR CORRESPONDENCE.]

At DAREN, they have a good course of ore in Francis adit.
ALL-Y-CRIB—good ore in the adit west, worth 25f. a fm. We sample 30 or 35 tons this week.

BRONFLOYD—good ore for 5 ft. wide in the end of the adit eastward.
CAE-GYNON—good ore in the adit driving westward, worth about 10f. per fm.
GELLER-HEIRIN—yet in unproductive ground, but daily expecting to get into ore ground.

RHEWINGUS—commencing to sink a shaft on the adit in the lode; lode very promising.

BWICH CONSOLES—good ore in the 45 and 35 west; sample this week 35 tons.
COURT GRANGE—the 40 cross-cut is through the lode; lode large, and of kindly nature: sold 24 tons, at 17f. 5s. 6d. per ton.

WELSH POTOSI—very good body of ore in the back of the adit, and preparing to take out the water to work below.

PENRHUW—good courses of ore in the 36 and 26 west.

GOGINAN—very good ore in the sink below the deep adit, with every appearance of a rich mine.

CWM SEBON—good course of ore in the 40 fm. level eastward, and every indication of a rich mine.

WEST NANT-Y-MWYN—opening upon the surface of some very fine lodes on the run of the Nant-y-mwyn Mine, and, no doubt, upon the same veins.

BODMIN AND LANIVET MINING DISTRICTS.—As mining, as a means of investment and enterprise, is now in the ascendant, every information connected with the several mining districts is interesting to your readers, allow me to describe the result of my visit here to a gentleman, specially appointed to inspect some mining property for a few capitalists, who intend taking up some promising mines as an investment. This locality appears to me to hold out reasonable expectations to the miner; and the indications and future prospects are probably equal to any district in Cornwall. At Bodmin Wheel Mary, a lode has been cut, worth 150f. per fathom. The operations are carried on in a spirited manner; and sufficient ore ground is already laid open to warrant the outlay, with the prospect of soon paying dividends. Another set, adjoining Wheel Mary, to the west, is as promising a mine as I ever saw. This one, in particular, was fixed upon by the party; and it has been reported as deserving immediate trial; ample means will, therefore, be supplied for the full development of its mineral wealth with all possible speed. Another new adventure (West Wheel Rose, situate in the immediate vicinity of the flourishing East Wheel Rose) has also been visited by us under similar circumstances, and was found far richer in appearance than had been represented. We carefully inspected each of these sets; and the samples of ore taken by us as fair specimens have been shown to many gentlemen of long mining experience, and pronounced to be of a most promising character.—A MINER: Bodmin, Jan. 23.

MINERAL WEALTH OF CUMBERLAND.—In the Journal of the 7th Dec. we alluded to "the Hole" estate (which is about being sold by auction) as a district for lead mining, the capabilities of which are considered to be very great, lying as it does in the heart of the great Cumberland lead district, and surrounded by so many rich mines. By reference to "Forster's Section of the Strata," we find the stratification to consist of all the beds between Grindstone Sill (marked 117 in the section), and the Tyne bottom limestone (marked 190 in the section), which crop out on the property, and this comprises the richest part of the lead measures, from which most of the ore has been obtained; and there appears little doubt but that capital, skill, and energy judiciously applied, would soon find a good return. There is one material advantage to the miner in Alston Moor—from the mountainous nature of the district, almost all the mines are entirely drained by day levels, and the machinery necessary for dressing the ore is worked almost exclusively by water-power; indeed, it would be difficult to go half a mile in any direction without finding a favourable place to erect a water-wheel, and, notwithstanding the extensive mining which is carried on, the steam-engine is almost unknown there. One great drawback, however, to Alston Moor has been its distance from any railway, which involves every one engaged there in the very serious expense of carting their produce more than 20 miles over a heavy country; but this will be remedied in 1851, when the branch line from the Newcastle and Carlisle Railway will be opened to Alston.

BALLYHOLLAND GRANITE QUARRY.—This quarry, situated about a mile from Newry, is said to be one of the best in the kingdom for the production of grey granite. It is on the top of a high hill, on the County Down side of the river. In the rainy seasons, hitherto, the men have been unable to work from the accumulation of water, which could not be kept down by the pumps; and the present owners, Messrs. Hugh and Alexander Campbell, conceived the idea of drawing off the water by pipes, after the principle of the syphon. Accordingly pipes of 8-inch bore were laid down, the air withdrawn by air pumps, when the experiment proved perfectly successful. The water continued running until the bottom was sufficiently drained for the men to work, and has so continued since. Very large blocks can be obtained at this quarry, and one of unusual dimensions, and a model of a granite house is being prepared for the Exhibition in Hyde Park.

The WESTON MINES (lead), now about to be worked by a new company, are situate in Priest Weston and Churchstoke, in Salop and Montgomeryshire. Several veins of ore have been discovered, three of them running parallel with each other, and intersected by two others east and west. The value of two has been already ascertained, one of them having been worked formerly at different periods; its width is from 2 ft. to 4 ft., and from all appearances large quantities of ore have been raised from it; the other, called the rider vein, running north and south, has already produced much ore, 6 tons being raised while sinking No. 3 shaft upon this vein, which is now looking very promising. A small expenditure, about 600f., is estimated will be sufficient to develop the resources of the mine, and lead to the discovery of a large body of ore. The sett, which contains about 3000 acres, is held under lease from Earl Powis for 21 years, at 1-12th dues. We observe it stated that the late Mr. Cross, of Chester, expended more than 7000f. in driving a level, which is within 50 fms. of its destination, where it would be 24 fms. under the present workings, or 42 fms. from surface. One of the lodes belonging to an adjoining mine runs through the Weston Mines, and from this lode it is stated many thousands pounds worth of lead have been raised. The mine is divided into 1024 shares, of 2f. each, and is to be worked on the Cost-book Principle.

THE OLD BRIMPTON MINE (tin) is situate near Dartmoor-bridge, in the parish of Lidford, in the Forest of Dartmoor and county of Devon. The sett is a very extensive one, being about three miles in length on the course of the lodes, for there are many, and is more than two miles in width, with a never-failing supply of water from the East and West Dart River, for any mining purposes which may be required, with a term of 21 years under the Duchy of Cornwall, with 1-18th dues.

WHEEL TOM.—In consequence of discoveries, shares have changed hands at a premium. It is reported that a copper lode has been cut very kindly.

WHEEL MAY.—This company has at last a prospect of soon having their expectations confirmed, for new and powerful machinery has been forwarded to the mine, in order to enable the captain to proceed in sinking the engine-shaft, in which a lode of promising appearance was cut some time since. Capt. Thos. Carpenter is a careful and practical miner, and would not hazard his reputation by positive assurances, which were doubtful of being realised. The district of the mine is comparatively unexplored, and the success of this company will, no doubt, stimulate new enterprise in the neighbourhood of Saltsash.

100 fms., a great length of tin ground being laid open in its course. The strata of Wheal Vor and Great Work Consols, both highly productive, form a junction in the centre of this set, from which a favourable inference is drawn as to the remunerative character of the present undertaking.

TREMAR MINE (copper).—This mine is situated in the parish of St. Cleer, near Liskeard, adjoining to, and having lodes parallel with, those of South Caradon, the great cross-course from which passes through the sett. An adit level has been driven 70 to 80 fms., intersecting three east and west lodes, producing good stones of yellow ore. A shaft has also been sunk on another promising lode, which, at 5 fms. from surface, is 2 ft. wide, with regular walls, and produces gossan, peach, priam, and black and yellow copper ore. The capital now sought to be raised is 1024 shares, at 4s. per share, which, it is believed, will be amply sufficient, and is for the purpose of providing the necessary machinery, sinking, driving, &c., to lay open the mine; it is, indeed, probable that from 1500l. to 2000l. only will be necessary. The sanguine expectations respecting this mine are supported by the fact that the South Caradon adventurers have secured a large number of shares, and by the reports of four eminent mining agents, who have inspected the mine.

WHEAL GILL.—The largest engine in the Liskeard district (a 70-in. cylinder) is about to be erected on this mine. The new adventurers are now determined to work the mine effectually, which was suspended in the time of the panic of 1846. The prospects here are excellent, inasmuch as rocks of copper were taken out, weighing 6 cwt., just before the mine was suspended.

EAST DAREN.—The 20 fm. level, in which there is a lode producing above 3 tons of silver-lead ore per fm., is suspended on account of the water, which requires more powerful means to draw it. The 10 fm. level east continues producing 3 tons of ore per fm., and the winze below the 10 is also rich.

SOUTH TOLGUS.—The agent writes (23d inst.) that they have cut Youren's lode in the 22 east, and that it is 22 in. wide, yielding $1\frac{1}{2}$ to 2 tons of ore per fm. The 54 east, on south lode, is also much improved, yielding $\frac{1}{2}$ ton per fm., and widening. The 12 west, on north lode, is yielding 2 tons per fm.

We regret to hear of the death, after a very short illness, of Capt. John Tabb, of Lamheroe Wheal Maria, whose good qualities and upright character won him the esteem of all to whom he was known. Capt. Tabb was appointed the agent of that mine at the commencement of its workings, in June, 1845. Capt. James Opie is acting as agent on behalf of the company.

ACCIDENTS.

Bollensiden Mine.—An aged miner, named George Noey, had bored two holes for blasting, the one intended to relieve the other. He fired the first, and the explosion went in to fire the other; and, while in the act of so doing, the hole exploded (having been fired by the blast of the other), blowing off the collar of the hole, smashing the poor fellow's face to pieces, carrying away the mouth with the teeth and front of the jawbone, breaking one of his arms, and cutting open his shoulder frightfully.

Carn Brea.—Thomas Hall fell down a winze and was killed.

Aberystwyth.—A most extraordinary escape from a violent death took place at one of the pits of the New British Iron Company's works a few days since. As Mr. G. Gaskell, the mineral agent, his nephew, W. Gaskell, and John Weeks, a workman, with a dog, were being let down the pit, the engine, from some cause or other, at present unexplained, stopped the engine, and left them suspended for upwards of five minutes in the shaft. On again starting the engine the motion was reversed, and they were drawn up with great velocity, the iron rope, 2 in. thick, was broken, the bearings and gearing torn away, which, with 300 or 400 yards of chain, the conductors, and part of the frame, went down the shaft with a tremendous crash. Instinctively aware something was wrong, Mr. Gaskell, as they rapidly rose to the surface, cried, "Jump for your lives," and, extraordinary to relate, springing at the critical moment in different directions, all escaped, with some bruises, the man Weeks being the most seriously injured. The poor dog was also much hurt, but recovered in a few days. The engine man was discharged.

—Richard Crump, aged 21, was killed at Bumble Hole Colliery, belonging to the New British Iron Company, by a fall of coal.

Dudley.—Ellyth Peacock, aged 19, was killed by a fall of coal at the Old Park Colliery. —Henry Ashton was dreadfully injured at Wren's Nest Hill Quarry by a sudden explosion of gunpowder in blasting. One eye was completely blown out, but it is hoped the sight of the other may be preserved.

Sheffield.—Benjamin Plant was descending the shaft at the Soaphouse pit, 116 yards deep, sitting upon the broad flange of a piece of iron pipe, and had got down about 30 yds. when he fell off to the bottom. He was immediately unseated, and taken up quite dead. Mr. Dunn, one of the proprietors, has given imperative orders since the accident that no workman, on pain of dismissal, shall in future, under any pretence, descend or ascend, except in the horse, a kind of raised cage, and shall also have a belt round his waist attached to the main rope. Plant had latterly been subject to fits of sudden giddiness, one of which it is expected he was attacked when he fell. He had been nearly 30 years with Mr. Dunn and his partners.

Merthyr.—John Price fell into the Cefen-y-Gelly pit, and was killed.

Sunderland.—James Hope, aged 32, was killed by an explosion of fire-damp in the North Kellie pit of the East Hutton Colliery. The accident occurred through his wilfully taking a naked candle, when his lamp was within reach, if he chose to take the trouble so light it.

St. Helens.—Henry Roughley was killed at the Blackbrook Colliery, being crushed by the chain breaking, and the descent of the waggon on the incline plane.

Douglas.—A dreadful accident happened to a boy named Bowen, while engaged at the rolling mills. He was in an inclined position, straightening the red-hot bars, when one entered just below the spine, and passed completely through his body. He suffered extreme agony, and died the same evening.

Llanberis Slate Quarry.—As Samson Jones was in the act of splitting a piece of rock, another piece, from just above him, fell and crushed him almost to pieces; in fact, the poor fellow's head was separated from his body, and thrown about 14 yards from it. A half-sovereign which he had in his pocket was bent double.

Rhymney.—John Price was killed here by falling into a balance pit.

Colliery Explosion.—On Monday an alarming explosion took place in one of the East-wood coal-pits, which was heard at a considerable distance, and burst open the safety door throughout the whole length of the gangways of the pit. Fortunately, only one of the workmen was injured, but he is burnt in a most serious manner; so that there seems but little hope of his recovery. His sight at present is gone, and the use of both arms.

EDUCATION OF MINERS' CHILDREN.—Many suggestions have been made for establishing schools for the education of miners' children, and though we have for years supported such principle, there appears always to have been an indifference on the part of distant shareholders, from not being on the spot, and thus sympathising with the population, which has hitherto been a bar to the full development of an educational system, near approaching to a gratuitous one. We are, however, happy to find that the subject is now being warmly taken up. The Devon Great Consols Company have set a noble example, by the erection of schools, at which the children of the miners are educated at 1d. each per week, and on the breaking up of Wheal Ruby, in the parish of Wendron, Mr. Broadley took charge of the school, and has continued the education of 180 children at the same almost nominal charge. What the Devon Great Consols can do others can do in proportion, and Mr. Broadley shows what individual exertion in a benevolent cause can effect. We trust such examples will not be thrown away.

MINING IN SPAIN.—A new weekly mining paper is now published at Madrid by the Peninsular Mining Company, called the *Aurora Minera*. It has commenced by publishing the Spanish Mining Law of April 11, 1843, a translation of which appeared in the *Mining Journal*, commencing on the 22d April in that year. The liberality of the measure has given a great impetus to mining in that country, as by its provisions gold washing is free to all, and surface working for iron, without any previous authority being required. Natives, or foreigners, may search for mines, and the finder is entitled to the concession. Quicksilver and salt are reserved as Government monopolies. This paper announces a discovery, in the Philippine Islands, of a mineral producing 62 ozs. of gold and 147 ozs. of silver to 1 cwt., or about 277l. It states that the reduction of the ores of Hienelaencina, in Guadalupe, is conducted by the English company of La Constante, who are forming another one, called La Opportuna, and the firm of Widow Roldan was getting up a third, with plenty of work for more. The prices published by it of some of the mines are enormous. It quotes the prices of shares of 64 mining companies, among which are Virgin del Carmen, 4000l. per share; Hienelaencina and Santa Cecilia, 2100l.; La Suerte, 1400l.; La Fatima, 1260l.; Animas, 3000l.; Observacion, 2500l.

SCULPTURE IN COAL.—West Wemyss has long been famed as the principal coal-field of the east coast of Fife. The Parrot coal of this district can be converted into articles of household furniture, such as looking-glass frames, writing desks, chairs, and tables. The distinguishing quality of the Wemyss coal, so far as we know, is not possessed by any other coal in the country. Mr. Thomas Williamson is at present making a sofa wholly composed of coal. It is 9 feet long, with three compartments or divisions, and is sufficient to contain seven people sitting on it. The front standards are beautifully carved, displaying three mongrel animals, which forcibly remind the spectator of those richly carved figures that appear so frequently in Dr. Layard's *Remains of Ancient Babylon*. This rare geological curiosity was ordered by Gen. Wemyss, and it is highly probable that it will appear at the Great Exhibition, as it is ordered to be finished previous to that time; and, as the General holds an appointment in the Queen's household, it may yet be transferred from the Crystal Palace to the palace of her Majesty. —*Fife Advertiser*. Mr. Williamson (says the *Gateshead Observer*), was many years a resident in Gateshead, and is, therefore, well known to not a few of our readers. He must be prepared to meet with competition from his old locality, it being the intention of G. H. Ramsay, Esq., of Derwent Villa, to exhibit various articles made from his now celebrated Cannel coal. The Queen, it is probable, may one day sit in her castle of Windsor, upon Mr. Williamson's coal sofa, and take her tea out of Mr. Ramsay's coal cups and saucers, by the side of the Earl of Durham's coal fire.

INCREASE OF THE COAL TRADE ON THE RIVER WEAR.—The vend of coals from the river Wear, for the year 1850, amounts to 648,463 Newcastle chaldrons, being an increase of 65,122 chaldrons upon the quantity vend in the previous year. This surplus vend has been made by the large collieries belonging to the Earl of Durham, the Hetton Coal Company, &c.—*Durham Ad.*

LATEST CURRENT PRICES OF METALS.

LONDON, JANUARY 24, 1851.

ENGLISH IRON.	per ton.	FOREIGN IRON.	per ton.
Bar, bolt, & square, London.	7 6-5 15	Swedish	11 10-12 0
Nail rods	6 0-5 15	CCND	17 10 0
Hoops	7 0-7 15	PSI	—
Sheets (single)	7 12 6-5	Archangel	—
Bars, at Cardiff & Newport	4 15 0-5 0		
Refined metal, Wales	3 5 0-3 15		
Do. "at Cardiff"	3 10 0		
Pigs in Wales	3 0-3 15		
Do. do. forge	2 5 0-2 15		
Do. No. 1, Clyde, net cash	2 3 0-2 4		
Blewitt's Patent Refined Iron for bars, rails, &c., free on board at Newport	3 10 0		
Do. do. for tin-plates, boiler plates, &c., ditto	4 10 0		
Stirling's Patent Refined Iron Troughed Pigs in Wales	2 15 0		
Staffordshire bars, at the works	3 10-3 15		
Rails	4 17 0-5 0		
Chairs (Clyde)	4 0 0		
FOREIGN IRON.			
Swedish	11 10-12 0		
CCND	17 10 0		
PSI	—		
Archangel	—		
FOREIGN STEEL.			
Swedish	15 0 0		
Ditto faggot	15 0-15 5		
ENGLISH COPPER.			
Sheets, sheathing, & bolts, p. lb.	0 0 9 1/2		
Tough cake	per ton 84 0 0		
TERMS.—a, 6 months, or 2 1/2 per cent. dis.; b, ditto; c, 6 months, or 3 per cent. dis.; d, 6 months, or 2 1/2 per cent. dis.; e, ditto; f, ditto; g, ditto; h, ditto; i, ditto; k, net cash; l, 6 months, or 3 p. ct. dis.; m, net cash; n, 3 months, or 1 1/2 p. ct. dis.; o, ditto; 14 dis.; * Cold-blast, free on board in Wales.			

WELSH BAR-IRON continues in good demand for shipment. There are large buyers at 4l. 15s. for the favorite brands; but no sellers under 4l. 17s. 6d., free on board, in Wales. IN STAFFORDSHIRE the makers continue full of orders, and are not disposed to increase those already on their books, at present rates. A difficulty has sprung up with the men during the last few days, which renders a strike not improbable.

SCOTCH PIGS have again slightly receded. SWEDISH IRON is quite neglected; several fine assortments are in the market. IN SPAIN a sale of 200 tons was reported in the early part of the week, at 16l. 2s. 6d. on the spot; the quantity, however, on the market is very small, and the holders now demand 16l. 5s.

COPPER continues in great request, both for the home and foreign markets. IN TIN several parcels of Banca have been purchased for home consumption, at prices varying from 85l. 10s. to 86l. IN BAR and BLOCK TIN a large business has been done, mostly on speculation; 85l. has been paid for block, and 86l. for bar, although the standard has not been altered. Refined is still very scarce.

LEAD.—A large business is also doing in this article. Spanish is much enquired after. TIN-PLATES.—The demand continues unabated.

GLASGOW, JAN. 23.—The pig-iron market has been excessively quiet during the week—the only transactions having been for immediate shipment, but there still exists much difficulty in getting tonnage; at the same time we must report that the shipments from this have been considerably larger during the early part of this month than were during the corresponding period of last year. Mixed Nos., good brands, are worth 43s. 3d. to 43s. 6d. per ton, cash upon shipment. No. 1, 3d. per ton more, and American brands, No. 1, fetch 44s. to 44s. 6d. per ton, cash. Storekeepers' warrants for iron, free on board here, are worth 9d. per ton extra. Manufactured iron remains very firm, and the demand constantly increasing.

An important meeting of the iron trade was held on Monday at Glasgow, to consider the best means to be adopted for counteracting the strong prejudice existing in England against the use of Scottish iron. That such prejudice does exist, and acts injuriously against the interests of the Scotch ironmasters, there can be no doubt; and if by any measures that can be adopted, this feeling can be removed, the effect would, unquestionably, be favorable to the latter. It is not for us to decide how far this prejudice is well founded, or whether there are any just grounds of complaint, as far as relates to the manufacture of Scottish iron. The movement now on foot, however, may suffice to show that the Glasgow manufacturers are determined to leave no means untried to demonstrate the injustice of the prepossession referred to. The meeting on Monday, at which a committee was appointed, was merely preliminary to a general meeting of the trade, to whom a report is to be made on the subject. The steps taken by the committee have not transpired, but it is confidently stated that they will be effectual for the purpose contemplated, and tend greatly to advance the interests of those for whom they are deputed to act. We shall, doubtless, have occasion to refer to this subject.

New Patents.

LIST OF PATENTS GRANTED DURING THE PAST WEEK.

- R. Bycroft, of Paradise Wolsoken, Norfolk, gentleman, for improvements in apparatus to be used by persons to secure warmth and dryness when travelling.
- G. Normand, of Shore-ditch, Middlesex, cabinet-maker, for an improved cooking and boiling apparatus.
- G. F. Munty, junior, for improvements in furnaces applicable to the melting of metals for making brass, yellow metals, and other compound metals.
- J. Lienard, junior, of Wiar-road, City-road, Middlesex, merchant, for improvements in purifying or filtering oils and other liquids.
- W. Rees, of Pembrey, Carmarthenshire, coal agent, for certain improvements in the preparation of fuel.
- E. Pace, of the firm of Taylor and Pace, of Queen-street, London, iron-bedstead makers, for improvements in bedsteads, couches, chairs, and other like articles of furniture.
- W. Burgess, of Newgate-street, London, gutta percha dealer, for improvements in machinery for cutting turnips and other substances.
- R. W. Slevier, of Upper Holloway, Middlesex, gentleman, for improvements in weaving and printing or staining textile goods or fabrics.
- C. R. Kent, of Charlotte Cottages, Old Kent-road, Surrey, mechanical engineer, for improvements in apparatus for measuring gas, water, and other fluids.
- J. Ransom St. John, of New York, in the United States of America, engineer, for improvements in the process of and apparatus for manufacturing soap.
- S. Cliff, of Bradford, near Manchester, manufacturing chemist, for improvements in the manufacture of potash, soda, and glass.
- A. Lorandou, of Redford-street, Strand, for certain improvements in machinery or apparatus for raising water and other fluids.
- A. Samuelson, of Banbury, agricultural implement manufacturer, for improvements in apparatus for cutting turnips, carrots, mangold wurtzel, and other vegetables.
- J. Bunnett, of Deptford, Kent, engineer, for certain improvements in public carriages, for the conveyance of passengers.
- G. Elliot, of Saint Helms, Lancaster, chemist, for improvements in the manufacture of alkali.

DESIGNS FOR ARTICLES OF UTILITY REGISTERED.

- J. Solomon, Red Lion-square, eye protectors and concentrators of light for opera-glasses.
- Hillard and Thomson, Birmingham, dress-fastener.
- Unwin and Rogers, Sheffield, cigar-holding pencil-case knife.
- Meyers and Son, Birmingham, penholder.
- W. A. Adams, Midland-Works, near Birmingham, new form of angle iron.
- D. Dalnrey, T. Ekins, and J. Nix, jun., Huntingdon, potato-sorting machine.
- J. G. Adair, New Bond-street, boot, shoe, clog, or galosh.
- W. T. Bradshaw, Sheffield, Bradshaw's improved potter's palette-knife.
- F. C. White, Liverpool-street, socket-piece for part of a brace.
- G. Ellis, Fore-street, City, bon.—*Mechanics' Magazine*.

BOOK POST.—The plan for promoting international communication and the consequent formation of a species of literary alliance amongst civilized nations, proposed by Mr. Lake, in a recent number of this Journal, by the establishment of a foreign book post, is under consideration by the Post-Master General. The benefits of such a measure would be many, especially during the present year of the Great Exhibition; for though vast numbers will visit our shores, to enjoy the advantage and pleasure resulting from a personal inspection, yet still more will be compelled to remain at home; and the only information they will obtain will be through the medium of the many works to be devoted to the subject, for the transmission of which to all parts of the world every facility should be afforded. This will, however, be only a temporary advantage; the greatest will be the spirit of friendly intercourse that it will assist in engendering, by which the eyes of the world will be opened to their true interest—the cultivation of peace—by a just perception of the benefits to be derived from such a course, and the contrast the results will afford to the desolations and wars of the last half century, which have ruined some countries, and brought others to the verge of bankruptcy. We trust that the post-office department will view the subject in its right light, and that no petty jealousies will be allowed to interfere with the obtaining of so desirable a result, but that it will assist in carrying out the great object of the Exhibition of all Nations—namely, the breaking down of the barriers that have hitherto separated the civilized nations of the earth—by opening the proposed channel of intellectual communication, as far as this country is concerned. Let each nation charge its own postage on a book, as on a letter, and it will find its way from Washington or Berlin to our doors.

THE PITMEN'S STRIKE.—We are glad (says the *Durham Chronicle*) to have it in our power to announce that the strike of the pitmen is at an end, and that the men have now resumed their work. The pity is that they were not wise enough in time to save the expense and unpleasantness of the ejections. This happy issue of what, at one time, promised to be a long and disastrous "turn-out," has had the good effect of removing all fears of a general strike; and it is thought that the owners and men will continue to work harmoniously together.

THE ARTESIAN WELL AT SOUTHAMPTON.—The boring for water at the Artesian well on Southampton Common, from which the town has been partially supplied with water for the last few years, and which has been looked upon as such an interesting experiment by the whole of the geologists of England, is to be stopped. The boring is nearly 2000 ft. deep.

Current Prices of Stocks, Shares, & Metals.

MINES.—The business done this week has been of a remarkably steady character, and without much advance as respects dividend concerns, with the exception of such as have shown improvements in the lodes, in which the rise has been sudden and important. We foresee that we are approaching the limit to which prudential capitalists will be inclined to go, in hesitating to pay a price for a dividend-share when the interest of capital would become reduced below 12 1/2 or 15 per cent.; and, doubtless, this is a sound and practical stand to take. Several new concerns of favourable aspects have had their shares distributed without difficulty; and, on the whole, we congratulate the mining interest on the present condition of affairs.

The Metal Market has been very animated during the week.—Copper firm, and in good demand.—Foreign Tin more enquired for, and several parcels have changed hands: a good business doing in Tin Plates.—Lead is firm, with a brisk demand.

The arrivals at Swansea during the week have been—1821 tons of copper ore, and 9 tons 11 cwt. precipitated copper ore, for the Cobro Company; and also 507 tons of copper ore; 782 tons of copper regulus; and 20 tons of silver ore. The sale of copper ores, on Tuesday, amounted to 2167 tons, producing 22,436l. 11s. 6d.

The weekly sale of copper ores at Redruth, on Thursday, amounted to 2613 tons, which produced 16,527l. 11s. 6d.

Wheal Mary (Redruth) sold 100 tons of copper ore, realising 421l. 2s. 3d. Tincroft sold 26 tons of black tin at 42l. per ton, and 4 tons at 25l. per ton. The Rocks and Treverbyn Mines sold two parcels of tin—the one at 55l. 7s. 6d., the other at 36l. 10s. per ton. The report states the mine to present very favourable appearances, and promises for increased returns as the workings progress.

Wheal Mary Ann sold two parcels of lead ore—88 tons to Pontifex and Wood, at 20l. 18s. 6d., and 93 tons to the Tamar Smelting Company, at 9l. 1s. 6d. per ton. The lowest tender for the first lot was 18l. 1s., by Locke, Blackett, and Co., and for the latter 4l. 4s., by Walker and Co.

Court Grange sold 24 tons of silver-lead ore, at 17l. 5s. 6d. per ton. At Callington, a parcel of lead ores, 45 tons, was sampled on Monday.

The Kelly Bray lode now produces 8 tons of copper ore per fm.

At Millpool, they are raising tin, and the stamps are fully employed, preparing for returns.

At Wellington Mine a new lode, worth 15l. per fathom, has been cut. A lode, 18 in. wide, has been cut at East Wheal Leisure in driving the 10 fm. cross-cut from Taylor's shaft; it contains copper, jack, and mundic. Both north and south lodes are expected to be cut in a few days.

At Wheal Adams, the lode has been intersected in the 28 fm. level, the part cut into being very promising, and productive of lead ore, of good quality. This is viewed as an important point in the operations, and likely to turn out well for the interests of the adventurers.

At Wheal Penhale, the lode in the 40 fm. level is much improved, and the caunter lode in the winze, since opening on it north and south, is stated to be worth from 50l. to 60l. per fm.

For the Merilyn agent's report, which gives a most favourable account of the operations, it appears that in the pitch between the whim-shaft and the boundary adjoining, a great deposit of ore has been taken away, somewhere about 25 tons. One stone broken was estimated at 1 1/2 ton weight; and of the entire mass 15 tons are in stones from 1 cwt. to 1 1/2 cwt., forming such a pile of stones as has never before been seen in the mine. At one spot the lode was about 4 ft. wide, without a bit of waste. This pitch was working on the boundary, but it was hoped that a good many tons would yet be taken away within the Merilyn sett.

The directors of the Devonshire Great Consolidated Copper Mining Company, at their board meeting, held yesterday, declared a dividend of 7l. per share, being 7168l. from net profit arising from sales of copper ores sampled for the months of September and October last. After payment of this dividend there will remain in hand a balance of 20,524l. 16s. 1d. in cash, ore bills not at maturity, and reserved fund applicable to the general purposes of the company.

At the Wheal Baller meeting, on Tuesday, the accounts showed—Ores sold (less dues), 3735l. 1s. 4d.; balance from last account, 960l. 7s. = 4695l. 8s. 4d.—Two months' cost, 781l. 12s.; merchants' bills, 253l. 2s.; dividend of 20l. per 1-12th share, 2560l.; leaving balance in hand of 1100l. 14s. 4d.—The report stated that upwards of 1000 tons of ore were discovered, during the two months' workings, more than taken away.

The Treviskey bi-monthly accounts show—Mine cost for October and November, 725l. 15s. 3d.; tribute of ore, 332l. 5s. 7d.; merchants' bills, 334l. 4s. 11d.; Tresavean water-charge, 229l. 7s. 9d. = 1671l. 13s. 6d.—By ore sold in Sept. (less lords' dues), 3443l. 10s. 3d.; leaving a profit of 1771l. 16s. 9d.; to which add balance last account, 417l. 8s. 5d. = 1813l. 5s. 2d. A dividend of 15l. per share (1800l.) was declared, leaving balance in hand, 13l. 5s. 2d. On Wednesday, 455 tons of ore were sampled, and the same quantity, it is expected, will be raised during the next two months.

The Warleggan Consols accounts show—Mine cost for Sept., Oct., and Nov., 185l. 11s. 5d.; materials and other expenses, 92l. 4s. 5d.; disbursements in London, 52l. 14s. 6d.—Balance last account, 51l. 11s. 7d.; cash received on call, 383l. 5s.; sale of tin ore, 25l. 12s. = 460l. 8s. 7d.; leaving balance in hand, 129l. 18s. 3d. The accounts were passed, and the report read to the meeting stated that another parcel of tin would soon be ready for sale. The report of operations, which have been chiefly confined to the southern part of the sett, was deemed highly encouraging. The balance in favour of the company has been augmented since the accounts were made up, by payments to the amount of 70l. 12s. 6d. The directors, we perceive, decline all compensation for their services until the returns are sufficient to pay dividends.

At a meeting of the Sidney Godolphin adventurers, the accounts presented showed—Costs to the end of last June, 693l. 17s. 11d.; for the five months ending in November, 626l. 18s. 4d.; merchants' bills, including 300l. on account of engine, 869l. 18s. 7d. = 2190l. 14s. 10d.—The amount of call in May last, less unpaid 16l., was 1008l., leaving a balance against the mine of 1182l. 14s. 10d. A call of 1l. 10s. per share was made, to meet the balance and defray the future expenditure of operations. The report stated that the engine is now at work, and the shaft sunk 12 fms. below the adit. The Orchard lode eastward produced good stones of copper ore, and the eastern end of Vivian's lode is now stated to be worth 10l. per fm. for tin and copper.

A report on the Leeds and St. Aubyn Consols was read at a meeting of Sidney Godolphin adventurers, explanatory of the present state of the mine, and the prospects held out in the contemplated working of the sett, when it was resolved that shares should be offered to the latter, in proportion to their interest, on payment of 10s. each, for working the mine.

At the Wheal Blencowe meeting, the accounts were as follows—Balance on last account, 65l. 12s. 11d.; mine cost for the four months ending Nov., 154l. 7s. 1d.; merchants' and other bills, 29l. 15s. 3d. = 249l. 15s. 3d.—By tin sold, three parcels, 49l. 8s. 1d.; amount received on calls, 64l. 4s. 6d.—leaving balance due to pursers, 136l. 2s. 8d., to meet which a call of 15s. a share was made. The agent's report states, that the two southernmost lodes, east and west, had been cut, one of which was very promising, and had yielded fine stones of tin, with every prospect of being productive. A cross-cut is also being driven, to intersect the east and west lodes.

At the meeting of Wheal Vincent adventurers, the report on the mine (given in the Journal of last week) was read, and considered very satisfactory. Some discussion took place relative to "Trevint Marsh" sett, and the secretary was instructed to offer Mr. Northam, the owner, twelve shares in the mine and 70l. in cash, or 25 shares in full of all demands, and the expenses of the lease. It was resolved, that 90 forfeited shares should be added to the number of shares, restoring the number to 1000. The cost-sheet for November was 118l. 11s. 3d., and payments were made amounting to 154l. 15s. 10d. The balance now at the bankers, all arrears of calls being paid, is 176l. 8s. 7d.

At the Berriow Consols meeting, a call of 1l. per share was made; and it was also determined to commence sinking the shaft on the main lode forthwith, and to continue driving on Budge's lode, to ascertain the best place for sinking a shaft. The agent's report states that small bunches of good quality ore had been found in clearing the adit on Budge's lode, and there are other lodes near, which can be tried at small expense by a cross-cut.

At the Bridford Consols meeting, the report of the agent stated that the great lode in the mine, consisting wholly of barytes, had been cut through, and found to be at least 40 ft. wide. Operations have been commenced at the western side, with a view to ascertain the best place for an engine-shaft. The character of the great lode is stated to resemble exactly that in Wheal Adams, and would, it is anticipated, be equally productive. The gossans from the lode have been found to yield 11 ozs. of silver per ton. The costs for the last three months (38l. 6s. 5d.) were allowed, and

the purser was authorised to procure a good steam-engine, when an opportunity offered of making an advantageous purchase.

At the Wheal Arthur special meeting, on Friday, it was recommended, in consequence of the prosperous state of the mine, that no more shares should be disposed of, but that a call should be made on the shareholders. The following resolutions were then passed:—That the Wheal Arthur be now divided into 1225 shares instead of 2048 as heretofore; and that the list of shareholders produced at the meeting be the shareholders to this date. That a call of 5s. per share be made, one-half to be paid on the 7th Feb., and the remainder on the 21st Feb. The report read at the meeting was highly favourable, as regards the prospects of the mine, which, according to the opinion expressed by the agent, is one of the best speculations in Cornwall or Devon.

The agent's report to the Mineral Court meeting states that the engine-shaft is sunk to the 40 fm. level, and the lode cut through, which is considered to be worth from 15s. to 20s. per fathom. A new whim has been erected, and other operations are in progress for developing the resources of the mine. The accounts show—Balance last account, 1565s. 19s. 6d.—Mine cost for Oct., 445s. 18s. 7d.; ditto for November, including balance of purchase money, 680s. 7s. 6d.—2692s. 5s. 7d.—By cash on call, 4s. per per share, less arrears, 943s.; arrears received, 62s. 10s.; water-wheel sold, 17s. 10d.; tin sold (less dues, 42s. 18s. 10d.), 730s. 1s.—1758s. 1s.: leaving balance against the mine, 934s. 4s. 7d. The mine is stated to have never presented a better appearance, and full confidence is expressed in the success of the undertaking.

At the West Downs Consols meeting, the accounts to the end of Dec. were passed, subject to the absent vouchers being produced at the next meeting, and a call of 10s. per share was made. On account of the large number of shares in arrear, the purser was authorised to take measures to have the affairs of the company administered by a Master in Chancery, unless the arrears, together with the call then made, be paid within 14 days. It was also agreed to indemnify the purser, Mr. Robins, and Captain Carpenter, the agent, against the costs of an action commenced by the East Crowndale Company, for an alleged illegal distress for rent. It was lastly resolved to commence an action for compensation, on account of damage sustained by the forcible removal of property, and other injuries committed, under the direction of the agent of the East Crowndale Company, counsel's opinion being first taken on the subject.

At the South Josiah meeting, on Monday, the accounts for the last two months showed—Balance last account, 100s. 4s. 8d.—By costs, Oct. and Nov., 58s. 2s. 1d.: leaving balance in hand, supposing all calls paid, of 42s. 2s. 7d.; against which there were liabilities, 75s. 8s. 8d.: leaving 33s. 6s. 1d. to be provided for. It was agreed to prosecute the level on the course of the lode, and to rise on its back, so as to ascertain the size of the ore part. A call of 10s. per share was made. The report stated that a favourable change had taken place in the lode, which was 2 feet wide, producing good stones of ore.

At the Weston Lead Mines meeting, the accounts showed—Mine cost from the commencement, in Sept., 107s. 10s.—By cash received on calls, 84s. 10s.; loan, 33s.—117s. 10s.: leaving a balance in hand of 10s. The estimated liabilities, inclusive of cost for Jan. and Feb., are 309s. 16s. 2d., and the assets 183s. A call of 5s. per share was made. The agent's report stated that at No. 3 shaft 3 fms. had been sunk, and the vein driven upon to the extent of 25 fathoms. Nothing, says the report, can look more promising and encouraging than this vein, in which some beautiful lumps of ore are often met with, forming almost, at times, a solid rib of 4 inches in width.

At the last meeting of Crane and Bejawsa adventurers, a call was made of 6s. per share, to meet the balance of 846s. then declared against the mine.

At the East Godolphin meeting, the accounts for the last six months were submitted, showing—Mine cost and merchants' bills for that period, 980s. 18s. 6d.; balance last account, 135s. 17s. 8d.—leaving balance against the mine, 845s. 0s. 10d. A call of 4s. per share was made, which will produce 1024s. The agent's report stated that the progress of the workings had been greatly impeded by a hard channel of ground in the engine-shaft, but this being now passed, it was believed that the chief difficulties were surmounted, and that the next report will be the most favourable yet issued. About 50 tons of ore are ready for sampling.

At Wheal Venton two-monthly general meeting, on Thursday, the accounts for Nov. and Dec., showing balance in hand of 486s. 18s. 2d., and a statement of assets and liabilities, showing balance of liabilities over assets of 36s. 9s. 11d., were submitted and passed. Capt. Osborn's salary was raised from six to eight guineas per month, and the present prospects of the mine were considered highly flattering. [The report is inserted among our Mining Correspondence.]

At the East Wheal Keeth meeting, on Wednesday week, it was resolved to erect a steam-engine; and on Wednesday a tender was submitted to the committee, which they will take into consideration on Wednesday next.

At the Bryn-Arian meeting, the accounts showed a balance in favour of adventurers, 68s. 9s. The mine cost for Oct. was 203s. 4s.; for Nov., 279s. 18s. 9d. By balance at last account, 339s. 15s. 9d.; sale of 20 tons of ore, less discount, 211s. 16s.: leaving balance as stated. A call of 5s. per share was made, to meet the cost of future operations at the mine.

Our Share List shows no tendency to a falling off in the number of transactions, nor, we believe, in the real amount of business done. For Mill Pool and West Frances there has been a considerable demand; and, independent of the well-maintained quotations of dividend-paying mines, it will be evident that smaller speculations of a promising character have attracted a full share of attention.

In Foreign shares but few quotations have been marked during the week. United Mexican have been done at 5s. to 5½s.; and National Brazilian at a slight decline on previous prices. Shares in Worthing (South Australia) have been sold at 2s. per share.

The usual Linares weekly report states that Wilson's shaft is progressing favourably, and contains a lode worth between 4 and 5 tons per fm. A considerable improvement is reported in the 55 fm. level, west of San Anton mine, now worth 4 tons per fm. The driving of this level, if it continues, will lay open a considerable extent of ore ground. The same level eastward presents no change, but an amendment was anticipated on approaching the ore ground formerly partially worked under the 45 fm. level. The cross-cut towards San Juan shaft, and the engine-shaft in the 45, are advancing favourably. The stock of ore at Linares, to Jan. 11, was 264 tons 15 cwt., and with stock elsewhere included, amounted to 448 tons 4 cwt.

By a letter, dated Cocoes, Nov. 12, received by the National Brazilian Company, we learn that the lode in Hamilton's slope presents a very promising appearance. The produce of the mine from Oct. 24 to Nov. 13 amounted to 7 mks. 3 ozs. 1 oit. 53 grs.

The Royal Santiago Company have received letters, giving additional details of the mining operations in progress. At Perseverancia, Thompson's shaft is now 6 feet below the 22 fm. level, and the lode, for a short distance, 2½ to 3 ft. wide, the remainder being small and poor. The produce, east from shaft, in the 22 fm. level, is 7 tons per fm. The winze between the 19 and 22 fm. levels is now communicated, the lode being 2½ to 3 ft. wide. Some of the other lodes are mentioned as being in a disordered state. In San Joaquin, Taylor's shaft is 6 fms. below the deep adit, in which there was a powerful stream of water, and, from the indications, a lode was believed to be not far distant from the end. At Angelita, the north part of the lode had been intersected, and preparations were making to excavate the lode.

A letter received by the St. John del Rey Company states that the supply of stone continued abundant, but the quality, at first good, had somewhat deteriorated. The gold extracted from 392 cubic feet of sand, the result of 10 days' stamping, was 7516 oitavas, yielding 19.96 per cubic foot. A remittance, consisting of rather more than 381 lbs. Troy, in eight boxes, each containing 4965 oit., was about to start for Rio.

Letters, of a date 10 days earlier, have been since received, which state the produce for October to be 20,614 oit.—198.37 lbs. Troy. These letters report a falling off in the quantity stamped in October, compared with preceding months—the reason assigned being a deficient supply of water, and the deteriorated quality of the stone. As regards Balu Mine, this falling off will be, it is expected, only temporary; but in Cachoeira of a more permanent character. The cost for Oct. amounted to 5538s., and the produce to 19,583 oit., amounting to 7517s. 0s. 4d., leaving a profit of 1979s. 0s. 4d., which is a slight diminution on the ordinary profits for the same period of working. The new stamps, it was anticipated, would be got to work in the course of January.

The despatches of the Copiapo Company, which we give in full elsewhere, present a very favourable account generally of the condition and prospects of the mines. From Checo Copper Mine some ore of excellent quality had been raised from the different levels. In San Pedro and La Compania the operations were limited for want of hands, but the stopes

continued to yield well, and ore had been sent from the last-named mine to Port Flamenno through the company's troops. In La Reyna the lode improved in proportion to the depth, and was expected to result in one of the best courses of ore in Chili. Deposits of 50 per cent. ore were found, and a bed of ore, it was anticipated, will shortly be met with in going deeper down. At San Augustin, one of the Flamenno mines, there are two large lodes, composed of gossan, yielding rich stones of ore, and the present object is to get down to a 12 fm. level, and drive a cross-cut north and south, and the operations for the development of this part are expected to be amply remunerative. In San Carlos, as in several other mines, the works were retarded from the scarcity of men. The produce for October, from the different mines, amounted to 62 tons. The report from the silver mines of the company is also satisfactory. In Al Fin Hallada, the produce of the lode in the 5 fm. level was 200 marks the cajon, and the quality of the ore in the 20 and 25 fm. levels is favourably alluded to. From Salvador, an adjoining mine, whose workings are within 5 fms., some very rich ore is being raised. In San Jose, Mercedes, and Carmen Alto, the operations are of a progressive character, with no very marked results. In Colorado the lode is precisely the same as in Salvador, and high anticipations are formed of its productive capabilities. The value of the company's property is likely to be enhanced by the direct communication about to be formed with Flamenno, by which provisions will be obtained cheaper, and an easy transit afforded for the ores. A remittance of silver, to the value of 2000s., is expected to arrive in a few days.

The accounts received from the mining districts of Copiapo by the Trent are of a satisfactory character. The produce of these silver mines has wonderfully increased since 1824. In that year the total amount obtained was 310 lbs.; whilst from 1829 to 1831, the annual amount was 3000 lbs. In 1832, the discovery of Chanarillo poured forth the unexpected amount of 16,000 lbs., and for three years consecutively from 40,000 to 45,000 lbs. per annum were brought into the market. For a time, however, the riches of Chanarillo in a great measure disappeared, and in 1836 the amount dwindled to the sum of 8500 lbs.; but the steady prosecution of the miners' labours was soon rewarded by the production of 19,000 lbs. in 1837, and 31,500 lbs. in 1838, inducing many persons to turn their undivided attention to mining operations. In 1849 the large quantity of 51,500 lbs. was the result of more minute investigations; but 1840 saw nearly as great a diminution as that of 1836, the total quantity produced being limited to 9500 lbs. Since 1840, however, the produce of silver has been steadily increasing. In 1841, it was 41,056 lbs.; in 1842, 41,420; in 1843, 39,599; in 1844, 61,497; in 1845, 76,723; in 1846, 80,397; in 1847, 102,052; in 1848, 130,552; and in 1849, the produce came up to the largest amount yet known, being 171,119 lbs. The year 1850 will apparently fully come up to its predecessor, as no less than 167,172 lbs., worth 670,000s. sterling, being the result of the working of the first 10 months being just advised.

News as to the Spanish mines at Copiapo is that Valenciana and Delirio continue enormously rich. Tres Puntas mines are very good; Retamo is returning great quantities of silver to its proprietors.

The news from the Peruvian silver mining districts is important, as announcing a large reduction in the price of quicksilver, in anticipation of Californian supplies of that mineral, indispensable for the reduction of silver. The price of silver in various states—such as bar and pinta—is firm; but there is no advance.

The Chilean Custom-house returns of imports and exports, for the second quarter of 1850, show the exports as—

	1848.	1849.	Six months—1850.
Copper in bars	157,445	178,716	104,947
" ores	99,189	76,884	—
" regulus	84,977	59,368	61,586
Silver in bars	214,593	309,373	167,316
Gold, cast	118,576	105,228	13,197

Mr. T. Allsop makes the following remarks respecting mining—

"A large and increasing business has been transacted in mining shares during the past two months, and it becomes more and more evident that were the mining interest properly re-organized on a more extended basis, ensuring the requisite guarantee for fidelity of management, with a more enlarged sphere of operations, these investments would acquire great favour. There is no more legitimate application of capital than in extracting wealth from the earth, whether from the surface or the interior, and, properly pursued, there would be none more advantageous. We have frequently urged this view on the leading members of the mining interest, and are glad to perceive that there is at length a prospect of a move being made in this direction.—The Silver Valley Sett, contiguous to the celebrated Wheal Brothers, silver mine, has lately been purchased by some spirited adventurers, and will be opened in connexion with Wheal Brothers in a few weeks.—The Bodmin Wheal Mary, and the Par Consols, west, continue to progress favourably. At the former, the water in the shaft at the 10 fathom level was forked in the beginning of the present month, and the exploration of the abandoned working has revealed a rich lode at that shallow level; the lodes worked on tribute in the adit level being found to increase in richness below.—The West Far is progressing, but from the nature of the ground in the shaft the sinking is not rapid. The Younder lode in this mine is very rich for tin.—The North Basset continues to produce large quantities of ore of a rich quality, and it is likely to take rank amongst the best mines in Cornwall.—The Nap Down Consols is situated in a very favourable locality, and will be worked with vigour. The specimens produced by this mine augur well for the success of the exploration.—The Wheal Providence, in the immediate vicinity of the Great Devon Consols, presents great promise of mineral wealth, and there are good grounds for more than hope when the powerful steam-engine, now in progress of erection, shall be fully at work, and the water forked to the 68 fm. level. The lode is gradually becoming more rich as the adit level is driven east on the course of the lode. A large quantity of ore is now standing in the adit to the west of the whim shaft, which will be realised when the water is forked; when also the lode will be developed in the lower levels, and the very extensive workings of the former adventurers will be opened out and worked to advantage. The appearance and character of this mine are precisely similar to those of its neighbour, the Great Devon Consols; and there is every indication of its possessing riches similar to the Wheal Mary, which is by far the richest mine in the world."

11 JULY, THURSDAY.—Messrs. T. W. Flint and Co. state that mines have not been extensively dealt in during the week. Transactions are 20s. and 21s.; Wellington, 15s. 6d.; Bedford, 6s. and 6½s.; St. Anlyn, 5s. and 5½s.; Trevisay, 18s. and 20s.; Gustavus, 6s.; West Providence, buyer 6s. seller 6½s.; West Tolgus offered at very low prices.—Railways have suffered a decline since they last wrote; but the market has since re-acted, and there is more disposition to buy.

FRENCH DUTY ON BRITISH COAL.—We are happy to be able to state that, in consequence of the representations which have been made by the British Government to that of France, the subject has been under the serious consideration of the President of the Republic and the Minister of Commerce, and that there is every probability of the desired alteration being shortly complied with. Notwithstanding the opposition of the coal interests of France, the preference is invariably given to English and Welsh coal for the use of Government steam-packets and the national steam navy, as also by all the principal manufacturers.

MODEL FIRE-ARMS.—The Lords Commissioners of the Treasury having had under consideration the application of an eminent metropolitan gunmaker, for the admission of certain pistols, gun-barrels, and other articles purchased on the continent, which have been imported into this country from Belgium, their lordships have conveyed to the proper authorities of the Revenue their sanction for the admission to entry of the articles mentioned, on payment of the duty thereon, and on the party making a declaration to the effect that they have been imported into this country solely for the purpose of effecting improvements in the manufacture of the articles.

QUICKSILVER.—A firm in the City, we learn, is authorised to open a floating policy for 300,000 lbs. of quicksilver, from the mines of New Almaden, in South California. The supply of quicksilver to the Pasco and other silver districts in South America is of the greatest importance in raising the yield of silver ores. In fact it will give an impulse to silver mining, such as it has not received since the genius of Trevithick revived the workings of the overflooded mines by setting the first steam-engine to work on the heights of Pasco. Trevithick's labours have borne their fruit, and now an ample supply of steam machinery enables abundance of ore to be raised, but its reduction in the amalgamation process by a cheap supply of quicksilver is the stage to which a stimulus must be applied to increase the yield, and which the discovery of the cinabar mines of California promises to afford. The effect of the large supplies which the New Almaden Mines promise will be to reduce the monopoly price of the quicksilver of Almaden, Jaria, Huancavelica, and the other seats of production. To Mexico the benefit will be great, inasmuch as Zacatecas, Guanajuato, Sonora, and the other mining districts will derive their supplies from the ports on the Pacific, from which the communications are more convenient, instead of from the ports in the Gulf of Mexico.—Daily News.

SILVER-LEAD ORE.

BIDDINGS FOR 24 TONS SILVER-LEAD ORE FROM COURT GRANGE MINE.
Sold at Aberystwyth on the 20th January.

Bidders.	Amounts Bid.
Newton, Keates, and Co. (purchasers)	£17 5 6
Locke, Blackett, and Co.	16 5 0
Mather and Co.	16 5 0
Sims, Williams, Nevill, and Co.	17 5 0
Thomas Somers	14 0 0
Tamar Smelting Company	16 7 6
Walker, Parker, and Co.	16 16 6

[In our statistical information we should have stated the quantity of ores from this mine, for the quarter ending Christmas, at 71 tons.]

LEAD ORES.

Sold at Liskeard, on the 21st January.

Mines.	Tons.	Price per Ton.	Purchasers.
Wheal Mary Ann	35	£20 18 6	Pontifex and Wood.
ditto	9	1 6	Tamar Smelting Co.
Total tons, 181.—Amount of money, 2635s. 7s. 6d.			

Sold at Aberystwyth, on the 20th January.

Mines.	Tons.	Price per Ton.	Purchasers.
Goginan	45	£16 3 0	Sims, Williams, & Co.
ditto	18	3 6	Newton, Keates, & Co.
Frongoch (Lisburne Mines)	30	11 11 0	Walker, Parker, & Co.
Graigoch	34	11 3 0	Sims, Williams, & Co.
Cwmystwith	60	11 5 0	Pantier Smelting Co.
Nanteos	35	10 15 0	ditto
Cwm Erfin	33	15 1 6	Newton, Keates, & Co.
Total—322 tons (21-gwts.) dry ore.			

Ticketings at the King's Head Hotel, Holywell, on the 23d January.

Mines.	Tons.	Price per Ton.	Purchasers.
Pant-y-mwyn	30	£11 0 0	Walker, Parker, & Co.
Pen-yr-henblas	50	11 3 0	ditto
Westminster	27½	11 5 0	ditto
ditto	27½	11 5 0	Newton, Keates, & Co.
ditto	50	11 7 0	Walker, Parker, & Co.
Jamaica	40	11 0 6	Newton, Keates, & Co.
Belgraves	15	11 1 0	Walker, Parker, & Co.
Moysafin	70	11 8 6	Newton, Keates, & Co.
Haiklin Hall	20	12 1 0	Walker, Parker, & Co.
South Australia	10	11 11 0	Newton, Keates, & Co.
ditto	15	9 13 0	Walker, Parker, & Co.
ditto	15	11 2 6	Newton, Keates, & Co.

BLACK TIN.

Sold on the 18th January, to the New Blowing-house, St. Austell.

Mines.	Tons.	Price per Ton.	Amount.
Rocks and Trevelyan United	12 16 3 17	£35 7	
ditto	0 9 3 5	36 10 0	—£729 3 4

The following are the sales for the last five months, which show a steady progression:—

Date.	Tons.	Price.	Amount.
1850—September 20	7 5 3 26	—producing	£388 2 2
October 18	7 10 2 26	"	401 14 10
November 22	8 7 2 22	"	409 6 0
December 20	10 5 0 5	"	561 18 8
1851—January 17	13 6 2 22	"	739 3 4

Mines.	Tons.	Price.	Purchasers.
Tincroft	13	£42 2 6	Union Smelting Co.
ditto	2	25 0 0	ditto
ditto	6½	42 2 6	Daubuz.
ditto	6½	42 2 6	Williams & Co.
ditto	1	25 0 0	ditto
ditto	1	25 0 0	Daubuz.

COPPER ORES.

Sampled January 1, and Sold at Swansea, January 21, 1851.

Mines.	Tons.	Prod.	Price.	Mines.	Tons.	Prod.	Price.
Cobre	87	15½	£11 17 6	Cuba	83	13½	£9 10 0
ditto	71	15½	11 18 0	ditto	50	21½	16 4 0
ditto	68	24½	18 12 6	ditto	32	26½	19 15 0
ditto	60	24½	18 3 0	West Kaw-aw	61	9½	0 3 6
ditto	53	15½	12 0 6	ditto	51	10½	7 0 0
ditto	16	19	13 16 6	ditto	50	7½	5 8 0
ditto	115	16½	12 1 0	ditto	46	9	6 1 0
ditto	110	16½	12 8 6	ditto	45	7½	4 7 6
ditto	108	16½	11 19 0	ditto	44	8½	5 15 0
ditto	107	15½	11 9 0	ditto	36	8½	6 0 0
ditto	7	69½	52 0 6	Knockmahon	105	7½	5 7 0
Santiago	100	7½	5 10 0	ditto	45	9½	7 1 0
ditto	95	7½	5 10 6	Kaw-aw	55	14½	12 6 0
ditto	87	7½	5 10 6	ditto	45	14½	12 6 0
ditto	83	8	5 12 6	ditto	2	40½	31 3 6
Cuba	88	23½	17 15 0	Ballynoe	42	7½	5 15 0
ditto	85	13½	9 13 6	Parings	40	25	19 12 6

TOTAL PRODUCE.

Cobre	801	....	£10713	16	6	Knockmahon ...	150	....	£ 879	0	0
Santiago	365	....	2022	8	6	Kaw-aw	97	....	1232	2	0
Cuba	338	....	4614	17	6	Ballynoe	42	....	241	10	3
West Kaw-aw	333	....	1947	17	0	Parings	40	....	785	0	0

COMPANIES BY WHOM THE ORES WERE PURCHASED.

Mines.	Tons.	Amount.
English Copper Company	192	£2404 8 3
Freeman and Co.	85	822 7 6
Grenfell and Sons	304	3117 6 0
Sims, Williams, and Co.	212	1283 13 0
Vivian and Sons	359	2784 0 0
Williams, Foster, and Co.	367	2961 0 0
Schneider and Co.	135	3 6 0
British and Foreign Company	513	6352 12 3
Total	2167	£22,436 11 6

Copper Ores for Sale 11th February.—Cobre, 1200—Santiago, 433—Cuba, 200—West Kaw-aw, 91—Beerhaven, 75—Kaw-aw, 7.—Total, 2010 tons.

AVERAGES.

Produce.	Price.	Standard.
British	£ 5 16 6	£100 0 0
Foreign	10 15 10	88 8 0
Sale	14½	£10 7 0
Totals—British, 192; Foreign, 197½=2167 tons (21 cwt.)		£88 19 6

AVERAGES OF LAST SALE.

Produce.	Price.	Standard.
British	£ 6 17 6	£101 9 0
Foreign	12 2 6	90 13 0
Sale	14½	£10 9 0
Totals—British 578; Foreign, 2018=2596 tons (21-cwt.)		£92 3 6

COPPER ORES.

Sampled Jan. 8, and Sold at the Royal Hotel, Truro, Jan. 23.

Mines.	Tons.	Price.	Mines.	Tons.	Price.
Devon Gt. Cons.	98	£5 6 6	West Caradon	93	£6 18 0
Wh. Josiah...	93	5 12 6	ditto	81	8 14 6
ditto	92	7 6 6	ditto	52	7 4 6
ditto	88	6 8 0	ditto	45	6 9 0
ditto	85	5 3 0	ditto	44	4 7 6
ditto	83	10 0 0	ditto	42	10 16 0
ditto	82	7 0 6	Fowey Consols...	92	6 10 0
ditto	81	7 4 6	ditto	75	4 11 6
ditto	80	6 6 0	ditto	68	8 15 0
Wh. Faeny...	96	5 10 6	Wheal Friendship	71	7 19 0
ditto	94	6 6 0	ditto	71	7 19 0
ditto	86	6 2 6	ditto	42	4 11 6
ditto	84	5 14 6	Foldice	60	4 10 0
ditto	82	6 0 6	ditto	43	4 16 0
Wh. Maria....	65	9 4 0	ditto	38	4 4 0
ditto	61	5 12 6	Bedford United	136	6 2 6
Wh. Anna Maria	77	5 1 0	Wheal Maiden	24	3 18 0
ditto	70	5 12 6	Wheal Jewel...	11	4 6 0
			Wh. Mary Consols.	5	2 0 0

Transactions of Scientific Bodies.

MEETINGS DURING THE ENSUING WEEK.

THIS DAY	Medical—33, George-street, Hanover-square	8 P.M.
MONDAY	Geographical—3, Waterloo-place	8 P.M.
	Entomological—17, Old Bond-street	8 P.M.
	British Architects—16, Grosvenor-street	8 P.M.
TUESDAY	Medical and Chirurgical—85, Berners-street	8 P.M.
	Civil Engineers—29, Great George-street	8 P.M.
WEDNESDAY	Society of Arts—Adelphi	8 P.M.
THURSDAY	Royal—Somerset-house	8 P.M.
	Antiquaries—Somerset-house	8 P.M.
FRIDAY	Royal Institution—Albemarle-street	8 P.M.
SATURDAY	Asiatic—5, New Burlington-street	2 P.M.

INSTITUTION OF CIVIL ENGINEERS.

JANUARY 21.—WILLIAM CUBITT, Esq. (president), in the chair.

The discussion on Mr. Digby Wyatt's paper, "On the Construction of the Building for the Exhibition of the Works of Industry of All Nations, in 1851," was continued throughout the evening, and will be resumed at the next meeting, on the 28th January.

NOTICES TO CORRESPONDENTS.

In a few weeks we shall publish the commencement of a SERIES OF PAPERS, to be continued weekly, detailing

The History of Mining,
ITS RISE AND PROGRESS:

together with NOTICES of the EARLY METHODS OF WORKING; ANCIENT AND MODERN INVENTIONS, with their subsequent IMPROVEMENTS; comprising also A SKETCH OF METALLURGICAL OPERATIONS, from the EARLIEST PERIOD to the PRESENT TIME.

The Great Exhibition.

In the "MINING JOURNAL" will also be given a detailed description, with all necessary illustrations, of every object connected with MINING and ENGINEERING, which may be produced at the forthcoming Great Exhibition.

The Compendium of British Mining,

BY J. Y. WATSON, ESQ., F.G.S.

We have the pleasure to announce, that Mr. WATSON has consented to revise and correct, to the present time, his interesting EPILOGUE OF BRITISH MINES, for republication in our columns—the fourth portion of which appears in this day's Journal. In the "Compendium of British Mining," it will be remembered, the actual position of the different mines is accurately described, both as to capital and working.

At the end of each year, a copious INDEX is published, which renders the volume an interesting and valuable record.

Mr. Hopkins will leave London for Devon and Cornwall on Tuesday next; letters will reach him by being addressed to his office.

"J. W." (Brettle-lane, Stourbridge).—Continued press of matter has hitherto prevented our promised reprint of the "Data for Blast-Furnace Managers," by Mr. S. B. Rogers. Preparations are, however, making for its insertion, the commencement of which we hope to announce in an early Number. We agree with our correspondent that the subject of the use of caustic lime instead of limestone (a paper on which appeared in the Mining Journal of the 4th inst.) is an important one, and which should not be lost sight of. We hardly need say that we shall at all times be happy to receive such communications, which, if authenticated, shall meet immediate insertion. There can scarcely be a doubt that all persons connected with the manufacture of iron should have ready means of testing specimens of various minerals, fluxes, &c., which may fall in their way, and the only hydrogen blow-pipe is the most powerful and useful. For prices of different descriptions, we must refer our correspondent to Mr. Button, Holborn-hill, or Knight and Sons, Foster-lane.

"M. A." (Tavistock).—Water-wheels, constructed of all wood, have been generally constructed of oak for axle arms and rings, with yellow deal or Norway buckets. Where wood and iron are combined, the arms and axle are sometimes iron, with deal and buckets. What are generally termed iron wheels are all iron, except the arms, which are deal or oak. We know not an instance of a wheel being entirely constructed of Norway timber.

The Dhuirde Copper Mine, county Cork, was worked by the Mining Company of Ireland but, after having been unwatred and inspected, it was considered advisable to relinquish the speculation.

THE AMERICAN CHURN.—We have received a communication from Messrs. Key and Mitchell, the agents for the sale of Anthony's Patent American Churn, in reference to some remarks by Dr. Murray, in a former Journal. They say, "When a party becomes a pleader for the public, he should be well acquainted with the subject on which he undertakes to plead; and it behoves persons carefully to avoid, by word or deed, injuring the reputation of another. Dr. Murray evidently cannot be aware either of the mode of construction or the circumstances relating to the churn. In the former there is no similarity whatever; the barrel churn rotates, and is fitted with cross-pieces inside, which act as dashers as the churn revolves on its axis. The American Churn is a neatly fitted box, with a solid dasher, having air cells. The box remains stationary, the dasher rotates, and draws down the air through a hole in the lid, by which the air is mingled with the cream. This hole is always open. The barrel churn is tightly closed and air excluded. As to the price, it is precisely the sum charged for Baker's box churn, and was taken from his list, and the patentee thought himself perfectly justified in asking the same price for introducing a superior article. As to the exorbitant nature of the charges, and the languid and limited sale expatiated upon, nothing can be further from the real state of the case. They assure Dr. Murray that the sale has been unprecedented, and continues—few patented articles have found such favour with the public, and few have deserved it better. This churn has obtained prizes at every agricultural meeting where it has been exhibited, and the silver medal at the meeting at Exeter."

"A Well-wisher" almost belies himself; for he can scarcely be looked upon as friendly to the undertaking, if he delays conforming to the regulations which his co-adventurers in Wheel May have deemed necessary. Co-operation is essential in mining companies; and our correspondent had better sign the cost-book, and attend the meeting which is this day advertised. The secretary is always ready to give information, and we are informed, there are now some highly respectable parties in the list of shareholders.

"Subscriber" (Dowlais).—The returns are not yet made up; as soon as we can obtain the necessary data, which is a work of time and some difficulty, we shall publish full statistics of the make of iron for the past year, in comparison with former periods.

"B. D." (St. Austell).—The late forgery of mining shares is, no doubt, calculated to induce caution among brokers in dealing with strangers; but the circumstances are not very susceptible of imitation. Indeed, but for the fact that the party implicated, as was stated, sometimes "did business as a mining shareholder" himself, it is not probable he could have carried out a fraud of this class. He turned his knowledge to a bad purpose, through the facilities afforded by his previous acquaintance with parties whose names were made instrumental to the deception. Even with this advantage, he failed, it seems, in two other attempts to dispose of his forged shares; and there were circumstances, we fancy, that might justly have aroused suspicion in the mind of Mr. Fuller.

"A Shareholder" (St. John's-wood).—We must decline complying with the request. Apply to a shareholder, who will forward the information.

"A Sufferer" (Namur and Liege Railway).—Our space will not allow us to enter upon the subject of the legality, or otherwise, of the forfeiture of shares in this railway company. It was a line which, by the best judges, was calculated to pay as well as, or better than, any line in Belgium; and, doubtless, would have done so, if legitimately carried out, as it was not a line of difficult or expensive construction, and the traffic was certain. Our correspondent should put himself in communication with some of his brother sufferers, who feel themselves, like him, unjustly dealt with, call a public meeting, and raise a subscription to obtain counsel's opinion, and prosecute the restoration of their rights.

Mr. Walters's problem has already appeared in the Journal.

"T. W. B." (Lostwithiel) had better forward his letter to the directors; it is hardly suitable for publication.

"Medico."—A knife sharpener, of a peculiar kind, was invented by Sir John Robison, for setting the edge of razors, penknives, and surgeons' instruments. It consisted of two barrel-shaped agates, mounted on pivots, free to revolve in an elastic frame of sheet brass; the surface of the agates was supplied with finely pulverised corundum, emery, or diamond powder, and the edge of the blade to be sharpened was passed with slight pressure between the two agates, which, from their shape, could only be in contact at the central point, so that both sides of the edge were acted on at the same time; and if too much pressure was applied, the elastic frame allowed the agates to separate, and avoid injury to the edge of the blade. Like many other inventions, it was probably rather too ingenious for its purpose; or what is as likely, it has been found possible to attain the required object by less clever devices.

THE SHARE LIST.—Sir: It must be admitted that (as a ready reference for ascertaining the real marketable value of mining property) nothing can be more desirable than a "Share List" founded on fact; and, in order to render your list a safe guide to the capitalist, your unwearied exertions cannot fail to be appreciated; but whilst some are desirous of effecting an alteration in its form, it is to be regretted that no mode has been adopted as a safeguard against false and exaggerated statements, sometimes evidently made by parties whose interest lies in misleading yourself and the public; and as evidence of such I will content myself, for the present, with one instance only. From your Journal of last week it would seem that transactions had taken place during that week in a certain mine at 10s. and 15s.; whereas, the fact is that no share in that mine has been transferred since the 16th of December last, and then a *bond fide* transaction at 25s., and since which considerable improvement in that mine has taken place. Such statements, therefore, can only tend to divert the real intention of your Share List; and if your readers can suggest a mode whereby the list may be rendered more useful in substance as well as form, they will confer on the public a desirable boon.—J. F. Jan. 21.

Sir: In looking over the new arrangement of your valuable Share List, I was first aware of the fact, that the important mining interest of the North of England, now realising (without coal mines) a profit fully one-third of that arising from all the mines of the United Kingdom, was represented by two fields (Kewick and Derwent) in the miscellaneous section. After the good resulting from your publication, in the opportunity its columns afford for the interchange of ideas and experience, the direction of mining speculation into legitimate channels, and the crushing of dishonest schemes, you surely would not have any difficulty in finding able supporters in these districts, anxious to share its benefits with the southern mines, and give that publicity to their operations, which is the greatest safeguard to the mining adventurer. Hoping you will endeavour to attract our northern agents and managers to the importance of this subject, I am, yours, &c.—A MINING ENGINEER: Jan. 22.

"N. W." must consult a shareholder; we never give an "opinion" respecting any of the adventures which are offered to public notice. The utmost caution should at all times be exercised.

"Argus" (City).—If it be the fact, as our correspondent alleges, that Capt. Taylor, whose name appears in the reports, never visited or inspected the mine, but one opinion can be entertained as to the mischievousness of his name for the purpose of the speculation.

In that case, however, why does not Capt. Taylor write to disavow the report to which his name, in conjunction with others, is appended? We cannot enter upon the alleged secret motives for silence, when our correspondent affirms that Capt. Taylor's name has been employed surreptitiously, to give weight to the opinions published as regards the capabilities of the mine.

"J. S." (Tavistock).—Mr. J. H. Murchison is the eldest son of the late Hon. Alexander Murchison, of Springfield and The Groumet, Jamaica, and Elgin, North Britain; grandson of one of the most eminent Scottish worthies; and cousin to the present Sir R. I. Murchison.

"A Subscriber."—We have no doubt the utmost confidence may be placed in the opinion given on mining adventure by the gentleman named by our correspondent; from his extensive practical experience in the Cornish, South American, and European continental mines, he is considered an authority. There are many practical men in Cornwall and Devon, who might be found totally unconnected with particular undertakings, and from whom candid and honourable information may be obtained. We always abstain from giving names in answer to such inquiries.

"We must impress upon our correspondents, the necessity of invariably furnishing us with their names and addresses—not that their communications should, consequently, be noticed, but as an earnest to us of their good faith.

"It is particularly requested that all communications may be addressed—

TO THE EDITOR,

Mining Journal Office,

26, FLEET-STREET, LONDON.

And Post-office orders made payable to Wm. Salmon Mansell, as acting for the proprietors.

THE MINING JOURNAL

Railway and Commercial Gazette.

LONDON, JANUARY 25, 1851.

The MINING JOURNAL is published at about Eleven o'clock on Saturday morning, at the office, 26, Fleet-street, and can be obtained, before Twelve, of all news agents, at the Royal Exchange, and other parts of London.

So much attention has of late been paid to the subject of explosions, and other accidents in collieries, and science has contributed so much information for their prevention that, when they do happen through an absolute neglect of the most simple precautions, or the reckless introduction of palpably dangerous elements and practices, the parties so offending are justly deserving the most severe punishments which the law can inflict. It was our painful duty, in the last Number of the MINING JOURNAL, to insert and call attention to a communication, signed "M.," representing the dangerous state of the Jarrow Colliery, and the reckless conduct of the owners and viewer in compelling, against their wishes and remonstrances, and in spite of their fear for their lives, the men not only to obtain the coal by blasting—alone a highly dangerous process in so fiery a colliery—but to perform the operation by naked candles, to avoid a trifling additional expense for lamps, and a less dangerous mode of working. We had hoped, ere this, to have received some communication, or explanation, at least, modifying the *gravamen* of the charges made; but, up to the time of going to press, no such explanation has reached us; we must, therefore, leave the charges on their own merits, and to the revelations of futurity. It is, however, with feelings of gratification we notice a tendency in some of the colliery districts, on the parts of owners and agents, to lend their aid to plans suggested for the prevention of accidents, and the amelioration of the sufferings and dangers of the working collier. This has, doubtless, arisen from the passing of the long-looked-for measure, instituting an authorised inspection of collieries, and the reasons urged weekly in our columns, and those of our provincial contemporaries, in favour of the working miner. In one case, near Sheffield, as will be found among the accidents in this Number, Mr. DUNN, one of the owners of the pit in which the accident occurred, gave imperative orders that no man should in future ascend or descend without being properly in the cage, and also having a belt round his waist, fastened to the main rope. Many fatal accidents occur from the recklessness of the men coiling the rope round the thigh, sitting on the edge of the bucket with a leg hanging out, and other antics, when there are safer modes of going down and up; and one of the purposes of the Act in question was undoubtedly to stimulate owners to enforce rules and regulations for the men's safety. Mr. THOMAS BADGER (the coroner) also called the attention of the jury at the above inquest to the Act itself, and its provisions, remarking that they could not be too strongly pressed on the minds of all parties connected with the management of collieries, and alluded to the numerous accidents, of the usual various kinds, which the history of the Yorkshire coal-field presented. We have given the Act entire in a former Number, but the summary, as given by Mr. BADGER, may act as a refresher:—

By section 1, power is given to the SECRETARY OF STATE to appoint fit and proper persons for the inspection of coal mines, and to remove them, notice thereof being given in the *London Gazette*. By section 2, power is given to the inspector to enter mines at all reasonable times, and to inquire into the state and condition of the mine, the ventilation, the mode of lighting, &c.; and if anything is found defective therein, or likely to tend to the bodily injury of any person employed in or about the same mine, the inspector is to summon the manager, who, if he fail to attend, or do not satisfy the inspector concerning it, the inspector is to serve a notice of the defects on the manager or owner, and report the same to the SECRETARY OF STATE. The owner (section 3), when required, is to produce a map or plan of the mine to the inspector; or if one is not produced, or is found imperfect, he may require one to be made at the expense of the owner, on a scale of not less than 2 chains to 1 inch. No land agent, or manager of a coal mine (section 4), to be employed to act as inspector. Notice of all accidents occasioning loss of life (section 5) in any coal mine is to be sent by the manager or owner within 24 hours thereof to the SECRETARY OF STATE; or in Scotland to the LORD ADVOCATE, and he is bound to give any further information relating thereto that the SECRETARY OF STATE may require, under a penalty of not less than 10*l.*, nor exceeding 20*l.* Section 6 provides for the giving at least two days' notice to the SECRETARY OF STATE of the holding of an inquest in cases of death, arising from accidents in mines; and the coroner must adjourn his inquest if he find that such notice has not been given; and section 7 imposes a penalty of from 10*l.* to 20*l.* on any person obstructing an inspector in his duty. Section 8 provides for the recovery and application of penalties, and the last three are the customary clauses.

On a serious consideration of the important position which the Cornish miners as a body hold among the labouring classes of the community, the large interest, in a commercial point of view, which is created by their labour, and the severe toil and danger which constantly attends them during their hours of work, the mind is struck with something like surprise that the medical men of the county have not, to a far greater extent than has hitherto been the case, made public the results of their experience relative to the peculiar diseases to which the Cornish miner is subject, their most successful treatment, and the best means of fortifying the constitution as a preventive. In the previous absence of any such medical information, it gives us great pleasure to call attention to the publication of a work of this kind,* from the pen of Mr. WILLIAM WALE TAYLER, M.R.C.S., the surgeon to the Fowey and Par Consols Mines. It is very properly dedicated to J. H. MEREDITH, Esq., who was alone selected for the honourable and arduous post of carrying out the patriotic and gigantic undertakings of the late Mr. TREFFRY, to whom, had he lived, the author was naturally anxious to have inscribed his labours. The work will be published in parts, that which has already appeared being on consumption, a disease which, during 14 years' experience, the author has seen and studied in all its varied forms and characters, sometimes seeing its victims gradually wasting under its insidious progress, or often laid prostrate by a sudden blow; many lingering in an advanced state of the disease for five, six, or seven years, and others dying in as many weeks.

In the introduction, the author gives a graphic description of the habits, appearance, and temperament of the Cornish miner, and as there is much therein, as also in the work itself, of great interest to the public, more particularly to those who are connected with and reaping advantage from the working of the Cornish mines, we proceed to lay before our readers some extracts. "On the character of the true Cornish miner, it is remarked that—

He is quite of a distinct race from the agricultural labourer of the county, and they differ essentially in habits, appearance, and temperament, as if they belonged to separate nations. In stature he is generally below rather than above the middle height;

* "Practical Observations on the Diseases of the Cornish Miners—Part I. Consumption." By WILLIAM WALE TAYLER, M.R.C.S. Eng., surgeon to Fowey and Par Consols Mines, &c. London: John Churchill, Princes-street, Soho.

in form not stout, but compact, well-proportioned, exhibiting no great muscular development, though his strength and powers of bearing fatigue are surprising; in temperament ardent and irritable, his distinguishing characteristics are shrewdness, intelligence, indomitable perseverance, and a fondness, or passion, for what in the dialect of the county is called "venturing." The miner is generally a religious man, and usually is a member of some of the numerous dissenting sects with which Cornwall is teeming, seldom of the Church of England. His reading is almost entirely confined to religious subjects, for in the many hundred cottages I have visited, I have rarely seen any other books than "The Pilgrim's Progress," the Bible, or tracts connected with Wesley's life and associations. With his religion is mingled a good deal of enthusiasm, and the one who can read and write well generally aims at holding forth as a preacher or prayer-maker at some of the chapels, and there is often much powerful, though coarse, eloquence in their discourses. Every man of any ability in the lower classes, who has acquired some education, is anxious to display his powers. He is not satisfied with a mere mental conviction that he possesses greater knowledge or acquirements than his fellow-labourers, but he eagerly looks around for some field for displaying them. Thus, the same feeling that prompts the workman in a large city to be a radical or Chartist orator, in Cornwall induces him to become a Brimstone preacher. The miner is also an industrious man; many of them may be seen, after returning from their set hours of work, often after tolling all night, labouring diligently in their garden or potato ground. Indeed, he is rarely idle; on a wet day, when precluded from out-door work, he occupies the time in mending the children's shoes, or in some of the mechanical contrivances in which miners greatly excel. They take a great deal of pride in their gardens, which are no less remarkable for their neatness than for the beauty and quality of their flowers and vegetables—often being able to compete successfully with the horticultural productions of the gentry in the neighbourhood, as the various exhibitions and gardening societies annually testify. He resolves at once to give up his land, two out of three being voluntary members of some benefit society, paying from 1*l.* to 1*6s.* a year, in addition to what may be termed the compulsory payments to the mine club, so that in sickness, unless under peculiar circumstances, he is not necessitated to apply for parochial relief.

On the length of the miner's life, and the precautions necessary to prolong it, the author says—

I have said the miner is a short-lived man, and for this there are many obvious causes, in addition to hereditary diseases; the close places in which he has frequently to work, inhaling the most noxious air, the various cold draughts he must encounter at those times when all the pores of the skin are open from perspiration, and, last of all, the length of ladders he may have to climb (Fowey Consols is in some parts 200 fathoms from the surface), and, to add to this last danger, young men are very fond of racing up the ladders, striving who shall first reach the surface—a foolish pastime, that too frequently ends in incurable disease of the heart or lungs. From forty to forty-five is what may be termed the critical period in a miner's life; if he passes the latter successfully he may, probably, live many years; now this is a point to which I wish particularly to direct the reader's attention. If at that period a miner perceive his strength beginning to flag, his breathing short after any little exertion, that on climbing the ladders he is frequently compelled to stop on account of the palpitation of his heart, that his appetite is bad, and his flesh wasting, then it is of absolute importance for him to resolve at once to give up working underground; and, if he neglect the symptoms described, which are to be taken as so many inward monitors pointing out to him the course he should adopt, consumption, and that too of a rapid character, will soon follow. If, however, at this critical period he could change his employment for above-ground work, there is little doubt (unless the lungs be extensively diseased) that not only might his life be prolonged for many years, but he might be enabled to support, in a great degree, himself and family. This great crisis, this halt or pause, as it were, between life and death in a miner's condition, has not escaped the attention of the benevolent and wealthy of the county. About eight years ago, circulars were issued from the Royal Polytechnic Society of Cornwall, addressed to all the surgeons connected with mines, containing several important questions, but principally alluding to the one great point, as to the beneficial effect change of employment might produce on a miner's constitution at a period similar to that which I have endeavoured to describe. My reply was somewhat lengthy, and as it was inserted in one of the Journals of the society, I shall here very briefly give the purport of it—that from having been surgeon for some years to the Restormel Iron Mines, the greater portion of which were open workings, I had opportunities of noting the marked change for the better in many miners who had come thence from the deep mines in the west, with (apparently) broken-down constitutions, who at first appeared scarcely able to follow their employment, but in a very little time got through their work as well as their more healthy and youthful comrades."

Unfortunately, surface or above-ground work is very difficult to obtain in Cornwall, and the only remedy the author can suggest is emigration. If the miner's lungs are not affected, which can be easily ascertained, there is no reason why he could not be made a valuable inhabitant of another country. The introduction closes with the following apposite and philanthropic observations:—

I have shown that the miner is for the most part a prudent, industrious, religious man, a good and useful member of society as a husband and a father; and if the reader glances at his life, he must see that he has heavier hardships to encounter, without greater remuneration, than that of labourers in general; that he is constantly exposed to severe accidents, and that the great majority either die at an early age, or are ever incapacitated from working, through diseases inseparably connected with their employment. When I meditate on these facts, and look around this vast nation and behold the noble efforts that are being made on every side to alleviate, benefit, and ameliorate the condition of the working classes, I feel confident that some good and influential mind will yet be found to suggest a plan for relieving the miner in the critical period of his life, which I, in common with so many others, am unable to propose. Of this I feel confident, that the hand of benevolence, now so freely extended to all the productive classes of the kingdom, will not be closed when the interests of the Cornish miner are brought into view.

In his remarks on the effects of consumption on the mining population, the author has inserted a table of mortality for a period of two years, in the united parishes of Tywardreath and St. Blazey, from which it appears that, from consumption, 18 died under one year old, five between 10 and 20, three between 20 and 30, five between 30 and 40, nine between 40 and 50, six between 50 and under 60, eight between 60 and 70, and six above 70—making a total of 60; while the deaths from all other causes, out of a population of 6400, were 231: 39 of these died from small pox, a disease which had not appeared in the neighbourhood for many years—thus showing the mortality from consumption alone as about one in four. With respect to the cure of consumption, the author's opinion is, that it can be cured in the first stage of the disease, very rarely in the second, never in the third. After a description of the nature, cause, and progress of the disease in the lungs in its several stages, the author proceeds to give a general outline of his experience in consumption cases, the treatment of his patients, and the medicines on which he most relies for relief under varying circumstances. For the perusal of these we must refer to the work itself, which will be found highly interesting, and must now defer the subject until the appearance of the next number, which will be devoted to a consideration of fever and diseases of the heart, the next most prevalent diseases to which the Cornish miners are subject.

In last week's Journal we made some remarks on the contributions of the several mining districts to the Great Exhibition, and we now propose to notice those branches of German industry in which a certain degree of pre-eminence, as resting on natural and indigenous causes, ought to assert itself; in so doing, we shall follow the Berlin report in adopting the classification prescribed by our own Royal Commission.

To the section of Raw Materials and Products Germany could contribute largely—much more so than we have reason to believe she as yet intends. Germany has been the cradle of mining enterprise, as it has been the birth-place of geology. The mountain chains, known as the Hartz and Erzgebirge, have for upwards of 1000 years, yielded the richest metallic treasures; and the Mining School of Freiberg, in Saxony, is still without rival, and can boast amongst its pupils the distinguished names of men of every clime. But we need only allude to those of WERNER, VOIGT, LEOPOLD VON BUCH, and ALEXANDER VON HUMBOLDT. In this we see sufficient evidence of the high importance of mining, and the lofty scientific character which the study of mineralogy has assumed in Germany. Even at the present day, German miners are to be found at the most remote corners of the earth, who have here received their practical and scientific initiation into telluric mysteries, and have been here sought out by their employers: in Mexico, in Peru, in the copper mines of Australia, and the gold mines of the Ural Mountains, the labours are performed in a great degree by Germans. This fact alone attests the rich natural mineral character of the country—as, in fact, would almost every species of mineral, and some of the most important and valuable, in great abundance, scattered over its surface. Gold has been occasionally found, but its extraction has always been very limited; on the other hand, silver is found in considerable quantities, both in Saxony and in Mansfeld in Prussia, particularly in the neighbourhood of Eisleben, the birth-place of Luther, who was himself, as will be recollected, the son of a miner. The extraction of this precious metal has attained such a degree of perfection from the scientific discoveries in Freiberg, that the processes there adopted are universally accepted as the model for imitation. The samples of German silver or silver ore about to be sent to the Exhibition are few and insignificant; but their presence can be much more easily dispensed with than many of their humbler brethren; particularly as we understand we are likely to receive some very unusual specimens from recent discoveries in Spain and other countries.

The next most important of the precious metals is quicksilver; and of this mineral, with its subordinate ores—cinnabar, herpetic mercurial ore, and virgin mercury—we shall receive specimens from Idria, in Austria. Mercury, as is well known, in addition to its direct application as an amalgam in silvering glass, in the manufacture of thermometers, barometers, and other instruments, plays a most important part in the extraction of gold and silver from the ore; and its production in large quantities, and at a cheap rate, would prove of the greatest importance, and, indeed,

cause many mines (as, for instance, in Mexico) to be highly productive which cannot be wrought at present, owing to the high price of this mineral. Hitherto, the commerce of the world has received its chief supply of this so-essential article from the Almaden Mines, in Spain, amounting annually to about 25,000 cwts. Next to Spain, Idria has furnished the largest supply, being about 3000 cwts. a year. But there can be little doubt that a very considerable addition to the general stock could be obtained both from Bohemia and the Rhenish provinces of Prussia, if the necessary vigour and capital were applied to the now dormant capabilities of the cinnabar mines in both these localities. There is a wide field open for useful and remunerative enterprise in both places. The information we possess as to the more recent discoveries of this metal in China and California is as yet too scanty to permit us to speak with any degree of certainty as to their importance.

The production of copper throughout Germany is not equal to the demand, although the produce amounts to about 60,000 cwts. per annum. The smelting processes adopted in Mansfeld, in Prussia, have been carried to great perfection, and we shall be glad to see some elucidation of these modern improvements, for the benefit of our Cornish countrymen. A very remarkable circumstance connected with the copper smelting trade, and one which illustrates in a curious way the injurious action of our late Navigation Laws, has recently occurred in Hamburg, and has led to the introduction of this branch of industry into that city, in which it was until lately wholly unknown. The mercantile house of GODEFRID, in that town, had been in the habit of dispatching every month its vessels with German emigrants to the several ports of Australia, and as the only return cargo to be obtained consisted in the ores of the Australian and Chili copper mines, which, under the Navigation Act, could not be landed in this country, it became necessary to seek a market in Germany. Owing to the expenses of internal transit, it was found expedient to lessen the bulk by smelting the ores on their arrival, and this led to the erection of the large and flourishing smelting works, which now compete with ourselves in the manufacture of cake copper from our own colonial ores.

Iron is the next mineral of which we shall speak, and, as regards this metal, which may be said to form the thews and sinews of all modern industry, we must remark that the commercial legislation of Germany has hitherto opposed insurmountable barriers to the introduction of this great economic agent in quantities at all commensurate with the wants of its shipbuilding or agricultural population, large supplies being much needed to replace the great consumption by both these classes. The German iron is, generally speaking, of good quality; but economy in price is in many cases a more indispensable quality than even the goodness of the metal. Previous to the year 1844 iron was admitted into the states of the Zollverein, embracing a population of about thirty millions of souls, free of duty; but in that year the mining proprietors succeeded in imposing an entrance duty of 1s. per cwt. on all foreign iron, with the exception of Belgium, which enjoyed by special treaty a differential duty of but 6d. per cwt. The results of this measure are by no means such as to reconcile the consumers to the change—as the price of the article has been considerably augmented, without giving the anticipated stimulus to domestic production. The hardship of this change falls, perhaps, most heavily on the eastern and Rhenish provinces of Prussia, where the consumption is the largest. It is not impossible that the coming Exhibition may have the effect of inducing the protected classes to rely more on their own resources, than on the fiscal burdens of their countrymen.

The metal in which Germany, and especially Prussia, ranks highest is zinc, which is made to supply the absence of tin, and to the manipulation and treatment of which science is daily supplying new appliances. In this mineral Germany has no competitor, and the Exhibition will furnish abundant examples of its capabilities and novel applications, as the contributions are very numerous.

Lead is found in but small quantities in Germany; Villack, in Austria, and the Hartz Mountains, furnishing the principal supplies.

Cobalt and smeltina have been long obtained in large quantities from Germany, principally from Sneeberg, in Saxony, and from Hesse.

Manganese, so indispensable in the production of chlorine for bleaching purposes, is found in large quantities in Germany, and forms the subject of a large export trade. Although of a very moderate price, this mineral is of the most essential importance in many branches of trade, and we are glad to observe that the Exhibition will supply ample means for becoming acquainted with it in all its forms.

MR. ANDREW SMITH'S PATENT WIRE-ROPE.

In the Rolls Court, yesterday, Mr. S. Newall applied for an injunction against Messrs. Wilkins and Weatherly (Mr. Smith's licensees), of Wapping, to prevent them from carrying out Mr. Smith's patent process for the manufacture of wire-rope, dated 24th May, 1849. Mr. Turner, for the applicant, contended that there was no specific mechanical difference between the sun and planet motion in Mr. Newall's patent, obtained through the instrumentality of 90 wheels, and the means adopted by Mr. Smith, of a fixed crank and six connecting rods, producing the same results. Mr. Roundell Palmer, Q.C., for Mr. Smith, produced a model of his beautifully simple machinery, which was placed beside a model of Mr. Newall's complex affair, which immediately settled the business, the Master of the Rolls, at a glance, deciding that Mr. Smith's machinery was a vast improvement, that there was not the shadow of an infringement, and that he could not grant an injunction, but directed an action at law, and consented that the motion should stand over until such action was tried, defendants keeping an account of all wire rope they manufactured.

The history of the matter is simply this:—Mr. Smith was the original inventor of the wire-rope, and between January, 1835, and March, 1839, he took out no less than four patents for its manufacture, spending large sums of money in its introduction to Government and the public. Between February and July, 1840, a correspondence (copies of the original of which we have perused) took place between Mr. Gordon (Mr. Newall's partner), respecting the granting a license by Mr. Smith to Mr. Newall, to manufacture wire-ropes under the patents. Mr. Smith eventually declining to grant it. Mr. Newall then applied for a patent for machinery, in which, although there was no real difference between it and Mr. Smith's patent of 1839, he was successful, the Attorney-General refusing to hear Mr. Smith's opposition—on what grounds no one but Messrs. Newall and Gordon, and their friends, could by any means understand. Mr. Smith afterwards obtained a writ of *scire facias* to set aside the patent, but was prevented from following it up through partnership difficulties and litigation. These being settled; in May, 1849, Mr. Smith patented his improved machinery, by which the necessary motion is obtained by crank and connecting rods, instead of trains of wheels, friction being thus greatly diminished, and the process simplified. The following is one of the letters alluded to, with Mr. Newall's proposal:

2, Parliament-street, Wednesday, July 22, 1840.
DEAR SIR,—I take the liberty of enclosing you a remembrance that my friend Mr. Newall is desirous, if possible, to come to terms with you for a license to make wire-ropes, as specified in your patent for improvements, &c., sealed in March, 1839. I can meet you whenever you choose to appoint, and shall be happy if we can settle the matter as was originally proposed.
LEWIS D. R. GORDON.

Sketch of proposal to Mr. Andrew Smith, that he should grant to Mr. R. S. Newall, of Dundee, a license under his letters patent, sealed March, 1839:—

Mr. R. S. Newall would be willing to pay Mr. Andrew Smith the sum of 50l. at the time he (Mr. Newall) shall commence to manufacture ropes as described by Mr. Smith, and to pay a further sum of 2l. per ton of rope manufactured for the first 50 tons; or Mr. Newall would be willing to pay Mr. Smith 2l. per ton for the first 100 tons manufactured, instead of the terms above-mentioned. Mr. Andrew Smith shall be bound to grant no other license for six months after that granted to Mr. R. S. Newall, and not to grant any payment per ton shall cease entirely, if the patent is worked by any other parties, until Mr. Smith shall have made good his right to the letters patent.

The proceedings of the Newall party to obtain an injunction are, to say the least of it, most extraordinary. There was not a party in Court, even those not pretending to mechanical knowledge, but who were instantly convinced of the great superiority and improvement in the principle for spinning the wire without twisting, and that there were not the slightest grounds for the applicants to stand upon. If they thought they could wear Mr. Smith out in pecuniary means, we are happy to find so far they have been most signally defeated, and we have little doubt but that the action at law will prove equally favourable.

PATENT LAW.—NEW ORDER BY ATTORNEY-GENERAL.—The Attorney-General, with the concurrence of the Solicitor-General, has just issued an order to the following effect:—1. That the outline specification now required, at the application for a patent, must be signed by the applicant, or his agent, and dated. 2. The cancelling of any part of such outline specification may be effected at any time before the enrolment of the specification in full. 3. Any party opposing a patent and stopping it, must deposit an outline specification. 4. After the specification in full has been enrolled, the outline specification may be inspected, and office copies obtained.

Advices from Pampaluna in the *Herold*, state that the expectations of the proprietors of the Chango Mine have been fulfilled. The engineer, Don Luis de la Escosura, has from the first experiment with 60 quintals (or 5 tons of ore), obtained 35 quintals of pure copper (or 60 per cent.), and it is expected this will further produce 200 ounces of silver. It is supposed there is abundance of lodes in the neighbourhood of Chango.

ATMOSPHERIC INFLUENCES.—NEW SERIES.

BY FRANKLIN COXWORTHY, AUTHOR OF "ELECTRIC CONDITION."

The application of electricity to the formation of the earth and atmosphere, embracing, as it does, the whole sphere of natural philosophy, necessarily entails the difficulty of having first to treat of one part of the subject, which, for its proper explanation, involves the consideration of others. I must, therefore, claim indulgence, in so far that, if there should appear to be wanting absolute proof of the principles to which I may have occasion to refer, judgment may be suspended until such proof be adduced, although in this respect my difficulty may be more visionary than real—the paper by "S." (Mr. Lee Stevens), published in the *Journal* of 1849, having cleared the way for my present investigation, the more especially as the conclusions in those papers are now assented to by Prof. Faraday, in his admission that oxygen is highly magnetic, and that this magnetic, or electric condition, increases with the density, or compression of the gas.

It being immaterial, then, which of the propositions I first take into consideration, I cannot do better, perhaps, than begin at the beginning. I must, therefore, ask of the reader to be so good as to accompany me back to those remote ages when, as we are told by the geologist, the world was a liquid mass of fire; or, if he pleases, to that period when all the matter, as others assert, was in a gaseous state—in that condition, in fact, of which a comet may be regarded as typical.

It must not, however, be understood that in the use of the word "fire," whatever may be the ideas of others, I admit that at this period there could have been, or is now, at the central part of the earth, anything approaching to chemical action—such as is understood by combustion; but merely that the whole of the materials now composing this globe were intensely hot, or highly negatively electric—the principle in Nature which combustion renders evident, and the opposite to which is the intense cold that attends the decrystallisation of a salt; the first action causing a demand for electricity, the second setting free a greater amount than surrounding conditions demand.

These gases, then, under the influence of "gravitation," would necessarily occupy positions agreeably to their "specific gravity." The heaviest at the centre, the lightest at the exterior—these, naturally negative, such as nitrogen, protecting the condensable gases from the highly-electric atmosphere by which the whole was surrounded. Ultimately, however, this electric condition exercised a cooling influence on the nearest condensable gases, or compounds—such as vapour—which became the carriers of electricity to the more ponderable bodies beneath, and in its operation liquefied, and ultimately solidified them into a crust, surrounded by an atmosphere of carbonic acid, vapour, and nitrogen—our atmosphere of air not having then been formed.

Of the nature of this crust there does not appear to be any great deficiency of information, or, at all events, any great difference of opinion amongst those who have made geology their study, although its condition is a question that has not received the amount of consideration its importance demands, and I think is readily to be solved in reference to the properties which the matter composing the earth is known to possess, and the laws of motion.

There being at this period no great crystallising influence on the matter thus formed, and it being composed, geologically speaking, of the earths and soluble salts, many of them highly deliquescent, such as the muriates or chlorides, as the vapour condensed on the surface of the globe, the composed mass must necessarily have been of a soft or spongy nature, floating, "as it were," on the more dense and liquid body beneath; and being subject, therefore, to the laws of motion, would accumulate as the formation went on, and induration took place, within certain limits of the earth's greatest circumference.

Of this crust granite formed the base, and on it was deposited the lime, converted into a carbonate by the condensed vapour, which brought down the acid from the atmosphere through which it passed; and here commenced an operation which laid the foundation for the formation of that store of wealth which abounds in nearly every part of this highly-favoured island, and to which may be mainly, if not entirely, attributed the rapid progress we have made in science, and every other department of civilisation.

All matter has some peculiar property appertaining to its kind, and although on the discovery of this property we may be at a loss to comprehend the object of the Creator in imparting it, subsequent investigation generally reveals the wisdom of His purpose. It has long been known that whilst all salts, and it may be said all other matter, are more soluble in hot than in cold water, the solubility of lime decreases with the increase of temperature—a condition that admirably adapted it to the fulfilment of His purposes, in the first part of the creation.

The water, on contact with the solid matter, was necessarily raised to a high temperature, or the boiling point, and, therefore, was a rapid solvent for all the soluble salts, and would, consequently, free the lime, which was rapidly deposited, of all impurities, its insolubility being also increased by its conversion into a carbonate; and as at this period there could have been no change of electrical condition in the atmosphere, and consequently no gales of wind, the formation of the carbonate of lime must have been uniform within the limits where the deposition went on, had there not been a great disturbing cause; but at this period, there being no crystallising influence, the water readily gained access to the hot bed beneath, and being rapidly generated into steam, formed openings through which poured out the steam, carrying with it large quantities of the powder which accumulated in the neighbourhood of these vents into hills, which hills increased in density as the accumulation of matter proceeded, and ultimately became compact masses of very considerable height, forming between them extensive valleys which, as the temperature of the mass decreased, became immense lakes of water, saturated with salts of different degrees of solubility.

This brings me to the second period of this inquiry. I trust that, so far, I have proceeded without doing violence to any of Nature's laws; and if I have not consulted the opinions of others, I can urge in extenuation of my apparent offence, that to the best of my knowledge, no one has preceded me in this early period of the creation.

A very large block of lead ore, being upwards of 17 cwts., and of first-rate quality, has lately been raised by the Holmbush Mining Company. A large chest has been made for its reception, and is intended to be sent to the Great Exhibition of 1851.

BLACK DIAMONDS AT THE EXHIBITION.—In the *Mining Journal* of the 21st Dec., we noticed the fact of a monster specimen of coal having been raised from the Hange Colliery, Tivdale, 6 ft. high, 6 ft. in diameter, and weighing 5 tons intended, with all the tackle, for the Great Exhibition. We now understand that South Wales is about to contribute a monster specimen of anthracite, which will, considering it is from a seam only 4 feet in thickness, while that from Tivdale is out of the 30-ft. seam, not only a very contemptible figure by the side of his brother *snowball* from Staffordshire. It is a splendid specimen of the mineral resources of the district, 7 ft. long, 4½ ft. wide, 3 ft. thick, contains 94½ cubic feet, and weighs nearly 4 tons. It is from the colliery of Messrs. James and Aubrey, in the Swansea Valley—was obtained half a mile distant from the bottom of the pit, which is 106 ft. deep—was brought to Swansea by the canal, from which place it will be shipped for London. The colliers willingly gave their three days' labour, with only the reward of a barrel of beer, in the obtaining this specimen, the safe arrival of which they, of course, are very anxious about, feeling naturally proud of this product of the Welsh strata.

BURRA BURRA ORES FOR THE EXHIBITION.—We are in daily expectation of hearing of the arrival of several parcels and cases of ores from this extraordinary mineral property for the ensuing Exhibition in Hyde Park. We understand they consist of numerous splendid masses of native copper, specimens of every kind of ore produced by the mine, among which are the grey and red oxide, blue and green carbonate, with the ponderous green or botryoidal malachite for jewellery purposes. There is one large hollow basin-shaped specimen, somewhat similar to a gigantic bird's nest, composed of the above kinds of ore, and the crystallisations in the interior of which are beautiful in the extreme. There is also a beautiful specimen of pure red oxide, weighing from 7 to 8 cwts., and uncontaminated with other mineral, and numerous specimens from the newly opened mine at Emu Springs, called Karkulito Mine, and a beautiful block of malachite newly cut from the Burra Burra Mine, at Stock's shaft. These will prove an interesting feature in the Exhibition, as geologically descriptive of the colony.

Messrs. Clarke and Motley have just issued a circular relating to locomotive carriages for common roads, in which there appears a very large margin for contingencies. We understand it is contemplated shortly to publish a prospectus, with the view of forming a company to carry out the object of the invention, in shares of 10l. each, the first deposit being 10s. per share—that amount being deemed amply sufficient to give the invention an efficient trial.

THE ST. KATHERINE DOCK COMPANY.

The half-yearly meeting of this company was held at the Dock-house, Tower-hill, on Tuesday last, for considering of a dividend, and on other business.

THOMAS TOOKE, Esq., in the chair.

The CHAIRMAN said, that as soon as the report was disposed of, a statement would be laid before the meeting, showing the position of the company in respect to the dispute with the Board of Customs.

Sir JOHN HALL (the secretary) then read the following report:—

The accounts of the receipts and expenditure of the company for the year ending the 31st Dec. last, have been accessible for inspection by the proprietors during the last 14 days, and copies of them are now upon the table. From these accounts it appears that the gross earnings of the company, for the year ended the 31st Dec. last (omitting fractional parts) were 231,552l., which, as compared with those of the year 1849, amounting to 224,012l., show an increase in the gross earnings of the past year of 7540l.; but, from the extraordinary expenses the company have been subjected to during that period, a considerable portion of which has been occasioned by the proceedings of the Customs in these docks, the charges under the head of expenditure in 1850 have exceeded those of the preceding year by 6335l., which, deducted from the increase of gross earnings, leaves the net revenue in 1850 exceeding that of 1849 by 1205l.

The proprietors will doubtless recollect that, at the last half-yearly meeting, the directors announced to them that it would be necessary to write off certain sums for bad and doubtful debts, as also for losses, outstanding rates, rent, and charges upon goods sold by the company, which have not realised the amount due upon them. These sums, which were estimated not to exceed 20,000l., would, it was stated, when so written off, reduce what was then considered as the rest, standing at 48,583l., to about 28,500l., subject to a further deduction of 1318l., determined upon at that meeting, for the purpose of making up the amount required to pay a dividend then declared, at the rate of 2 per cent. for the half-year.

The result of an examination into the accounts by a special committee, appointed by the result of directors, established that the sums to be written off, after taking credit for some other items standing open, amounted to 15,535l., instead of 20,000l., and that, therefore, the balance in favour of the company was 33,948l., instead of 28,500l., as had been previously estimated.

As a further result of the examination referred to, it has been deemed advisable to adopt a system of accounts, which should show at once the earnings and liabilities of each year respectively; and for this important purpose the balance-sheet of the year ended the 31st Dec., 1849, has been remodelled accordingly. The effect of this remodelling has been to charge the year 1849, in addition to the disbursements of the 12 months, with those of a third half-year, amounting to 26,483l., which, being payable in 1850, would, according to the usage which has prevailed in this establishment since the commencement of business, have been charged to that year, but now, being deducted from the 33,948l. before-mentioned, leaves, according to the remodelled form of account, a final balance brought forward on the 1st of January, 1850, of 6563l. 13s. 3d.

A statement explanatory of the effect of this remodelling upon the balance-sheet of 1849 accompanies the accounts, from which it is apparent that the diminution of the sum representing the balance has not arisen from a decrease in the net earnings of the year.

The net income of the company for the past year was 71,513l., out of which was paid in July last a dividend of 2 per cent., amounting to 38,506l.; the difference, together with the balance brought forward on the 1st of Jan., 1850, amounting, according to the remodelled account, to 6563l. 13s. 3d., constitutes the present balance of 39,571l. 18s. 2d., which is applicable to dividend.

The proprietors will remember that at the half-yearly general meeting, in July last, it was resolved, for the purpose of making up the dividend to 2 per cent., to take from the balance the sum of 1318l. A dividend at the same rate, for the past half-year, would involve the necessity of further trenching upon the balance, and the directors, therefore, recommend that the dividend now to be declared be at the rate of 1½ per cent. for the half-year ended 31st Dec. last, which will enable them to restore to the balance a portion of the 1318l. above-mentioned.

Another reason the directors have for recommending this course is, that, although the prospects of the company as respects augmentation of business are favourable, they deem it prudent to provide against the contingency of some diminution of income that may arise from a reduction of rates upon several of the principal articles of importation recently determined upon in the port of London, while at the same time an increase of expenditure must be contemplated as arising out of the proceedings of the Customs.

The following returns of the quantities of goods landed and in warehouse, and also of the shipping and tonnage, that have entered the docks during the years 1849 and 1850 respectively, show a general improvement during the past year in the various branches of business in these docks:—

ST. KATHERINE DOCK.

Abstract—Goods and Shipping, 1849 and 1850.

Goods landed during years:—
1849 115,301 tons } Increase in 1850 over 1849
1850 119,149 } 3848 tons.

Goods in warehouse on 31st December of the following years:—
1849 63,452 tons } Increase in 1850 over 1849
1850 68,121 } 4669 tons.

SHIPPING—1848, 1849, 1850.

	Ships.	Tons.	Ships.	Tons.	Ships.	Tons.
Entered with cargoes	649	155,082	676	153,952	703	152,046
Entered light to load	223	33,947	253	41,837	239	48,624
Total	872	189,029	929	195,789	942	200,670
Exceeding in 1850 over 1848	90	38,677	90	38,677	90	38,677
" 1850 " 1849	34	4,881	34	4,881	34	4,881

Port of London General Return.

An account of the number of vessels, with the amount of their tonnage, that have entered the port of London from foreign ports in the years ended January, 1850 and 1851:—

	Ships.	Tons.	Ships.	Tons.
British	6917	1,444,311	6497	1,376,233
Foreign	3040	443,923	3413	527,174
Total	9957	1,888,234	9910	1,903,407
Decrease in 1850, 47 ships, 15,173 tons.				

From the balance-sheet it appeared that the total earnings of the company during the past year were 238,115l. 7s. 9d., and the total expenditure was 198,543l. 9s. 7d.—leaving balance of 39,571l. 18s. 2d. applicable to a dividend.

The report, and dividend of 1½ per cent., were then agreed to unanimously. Sir JOHN HALL then read a detailed report in respect to the dispute with the Board of Customs,—for which the CHAIRMAN confessed, the only remedy was, for them to get the nuisance brought before Parliament, when he had no doubt it would be abated. (Hear, hear.)

Mr. BUCKLE having eulogised the conduct of the directors and secretary, and condemned the vexatious mode of proceeding of the Board of Customs, moved a vote of thanks to the board for their services during the past year.

Mr. AID. FARCOMB seconded the motion, which was passed with acclamation. The meeting then separated.

NEW FUEL.—Among the list of patents in the *Journal* of last week is one granted to Mr. Alexander Speid Livingstone, engineer, for improvements in the manufacture of fuel. This invention, we understand, is of a very important character, both as regards the manipulation and the machinery used in its manufacture—the former being performed in a simple and economical manner, while the latter, from its cheapness and unerring accuracy, must render Mr. Livingstone's system eminently successful. The chief obstacle to the success of patent fuel works has been in the large outlay of capital for the expensive and delicate machinery, requiring constant attention and repair, besides the absence of all proper economy in labour employed, together with the uncertainty of producing the same quality of fuel, which has thrown it hitherto into disrepute, as no dependence could be placed upon one cargo being equal to another in quality, and this is well known to those who, from experience, approve of fuel in blocks, from its great facilities in stowage, and absence of depreciation in hot and frigid climates and of spontaneous combustion, (to say nothing of economy in evaporating power, when properly manufactured). There are thousands of tons of small coal lying useless at the coaling stations abroad, the accumulation of years, arising from the breakage of the large coal, which great loss, both in the material and freight, would be saved by fuel in blocks. We are happy to have it in our power to state, that not only will one cargo be equal to another in quality by Mr. Livingstone's process, but every block, because the process through which each is submitted ensures this object, while the evaporating power of the fuel is increased over and above that of the coal from which it is made in the proportion of 15 to 25 per cent.; and this concentration of evaporating force can be fully appreciated in sea-going vessels, when we estimate the saving of space, required for stowage of coal, by the use of fuel in regular shaped blocks, while to the many companies and contractors for carrying the foreign mails, block fuel holds out, when properly made, these advantages in no ordinary degree.

NEW STEAM-CRANE.—At the Liverpool Polytechnic Society, on Monday, Messrs. McNicholl and Vernon gave a description of a moveable steam-crane of such ingenious construction that, with a stationary engine, three motions may be at once attained, longitudinal, transverse, lifting, and *vice versa*; the machine, besides, being so simple that it can be worked by a boy.

THE FACTORY IRON-WORKS, TIFTON.—We are glad to state that these iron-works, which have been idle nearly nine months, are likely soon again to be put in active progress by Messrs. Barrows and Hall, of Bloomfield. One of the mills will commence in a few days, and the whole in a few weeks, thus securing regular employment to many in the neighbourhood, who since the closing of the works have met with but little work, and that precarious.

DOWLAIS IRON-WORKS.—These works are being carried on in a most spirited manner, and are making, on an average, from 1800 to 1400 tons of marketable bar-iron per week. Even this large quantity, it would appear, is inadequate to satisfy the demand made upon the works. There are numerous orders now upon the books—sufficient, it is said, to keep the works actively employed for some length of time.—*Swansea Herald*.

THE BOTTS VIADUCT.—It is intended that the centre span of this monster bridge will extend 250 ft., and the spans on either side 125 ft. Its height over high water-mark will be 90 ft., to allow vessels to pass to and from the quays at Drogheda. It had originally been contemplated that a pathway would be formed for the public on the viaduct; but it has been definitively settled upon that such will not be the case.—*Newry Examiner*.

ATMOSPHERIC RAILWAY SYSTEM—DEFECTS OF THE LONGITUDINAL VALVE, AND THEIR AVOIDANCE.

Although the unfortunate results of the attempts to establish a system of railway propulsion by atmospheric power on the Croydon and South Devon lines has given a blow to the principle itself, which will prostrate it for a time, and retard the development of plans which in themselves avoid those defects and disadvantages, it is not too late, nor do we think it out of place, to show exactly what the bases of those defects were, and thus pave the way for the introduction of other and better principles. We have repeatedly noticed one plan of atmospheric propulsion, which appeared to us based on sound and true scientific principles, and which we much regret, and are greatly surprised to find, has not, long ere this, been brought to practical trial; and having made some observations on the longitudinal valve system, we shall proceed to describe Mr. Weston's "novomotive" system, a model of which is now exhibiting at the Polytechnic Institution. That the system attempted to be introduced with the longitudinal valve was wanting in the two great principles of efficiency and economy, the public are fully aware, but the real cause of the failure of these expensive and wasteful experiments is probably not so fully understood; and we shall now endeavour to point out a few of the causes which led to its failure and abandonment.

On 20 miles of railway, being nearly the distance laid down on the South Devon line, it was found necessary to have six sections of tube, and consequently, seven engines, and which, we believe, represented 100-horse power at each station, making an aggregate of 700-horse power, to work a line only 20 miles long. We will now suppose a train of 50 tons running every 40 minutes in alternate directions, at a mean speed, including stoppages, at 30 miles an hour; and assuming the traction at this velocity at 15 lbs. per ton, the work to be performed should require only 60-horse power, while 700-horse power were in operation, and found insufficient. This enormous loss of power arose mainly from leakage in the longitudinal valve; and when we consider the circumstances of its construction, it leads us more to wonder how it could work at all than to be disappointed at its failure. The insufficiency of the lubricating material to preserve a vacuum—in winter too hard and thick, in summer too thin, and injuriously affected by dust and dirt—easily accounts for the enormous loss in engine power which took place, and to which may be added the variation of the load on the various gradients—atmospheric resistance to the moving train and friction. The principal cause of failure was, however, doubtless, the leakage, and hence the division of the tube into short sections of 3½ miles each; and taking each journey to be performed in 40 minutes, and each of six out of the seven engines to work 9½ minutes for each train, the time worked would be 57 minutes per train, giving about 8 minutes; so that each engine worked one-fifth of its time, and stood still four-fifths, or 140-horse power constantly working, and 560, or 80 per cent., constantly idle—the expenses of 700-horse power, thus being actually disbursed for 140-horse power of really available results. In addition to leakage, a large amount of power was lost in descending inclines, the system affording no means of avoiding a destruction of the vacuum in positions where it gave no protective results, such as descending inclines. To explain this, we may assume the gradients of a section to be an acclivity of 1 in 100 for one mile, succeeded by a decline of like gradient for another mile, then an acclivity of 1 in 50 for half a mile, and concluding with a mile of level. Now, in order to propel a train of 50 tons up an incline of 1 in 100 at 30 miles per hour, traction on a level being 15 lbs. per ton, the tractive force to be exerted would be, friction, 750; gravitation, 1120 = 1870 lbs., which, with a tube of 15 in. diameter, would require a vacuum of 10½ lbs. on the square inch. On arriving at the top of the incline, the resistance from gravitation ceases, and, in descending, acts in an opposite direction, impelling the train with the same force with which in ascending it retarded it, and being more than equal to the friction, the whole power of the vacuum should be dispensed with. Suggestions have been made to destroy it by letting air in; but this would prevent it ascending the next incline of 1 in 50, when still greater force is needed, and, consequently, it can only be counteracted by increased friction, by the breaks destroying the surface of the rails and the tire of the wheels. Taking all circumstances into consideration, it appears on this system totally impracticable to vary the power with the gradients, and, consequently, a great loss is inherent in the system from this cause, even sufficient to have rendered it a failure, had the valve been more perfect. Although in practice the gradients may not have been so severe as we have here assumed, or the changes so sudden, this defect rendered the plan far less suitable for undulating lines than the locomotive, which does not dissipate its power on descending inclines when the force of gravitation is sufficient for the purpose; and while the evils arising from this defect of the longitudinal valve system were probably, to some extent, mitigated by the arrangements of the sections, and by fixing the engines at short intervals, they must naturally have enhanced the difficulties and expense of working, and thereby hastened the temporary prostration of an invaluable principle for efficient and economical railway propulsion.

Mr. Weston's novo-motive railway may be defined as the converse of the old atmospheric system, with the continuous longitudinal valve, under whatever modifications the same may have been introduced by various inventors and patentees. Instead of a tube of many miles in length, with a longitudinal valve throughout its entire length, and which has been the great cause of leakage and objection to the atmospheric principle, we here have a cylinder of about 100 yards in length attached to the train; and in lieu of a piston in connection with the train, there is a series of pistons fixed in the centre of the railway for this tube to pass over. This tube is proposed to be about 15 in. diameter, composed of short sections, formed of thin sheet-steel, secured at the joints, and rendered air-tight by Indian-rubber, or other suitable material, encircled by ribs of iron, and the whole strongly attached to the axles of the carriage by a T piece, or backbone of iron. Being made in short sections, the tube accommodates itself to the various curves on the line. There is a slide valve a short distance from each end, which are trumpet-shaped, to facilitate the passage over the pistons, which slide-valves are self-acting. The pistons are formed of hollow tubes, about 10 ft. long, of less diameter than the tube, and are supported in a horizontal position by hollow stems at intervals of 100 yards, the length of the tube, in the centre of, and parallel to, the lines of rails, at a proper elevation for the tube to pass over. The lower end of these hollow stems are connected with a close tube, or vacuum main, running the whole length of the line, and both ends of each piston are fitted with elastic packing, to fit the tube. There is also a valve at each end of the piston, by which a communication is made from the interior of the tube, through the piston, to the vacuum main. These valves are acted on by tappet beds, fixed on each side of the tube, which are raised or lowered by levers, placed in the front carriage, under the control of the driver, who can thus minutely regulate the amount of power required. The valves at the two ends of the tube are acted on by inclined rails, placed on each side of the pistons, by which they are raised completely out of the way as the tube passes the pistons. The *modus operandi* of a railway on this construction is as follows:—When it is required to start a train, the stationary engines placed along the line are set to work to pump the air from the main, and keep it in a state of partial vacuum. This being done, and the train in readiness to start, with the fore end of the tube over a piston, the driver, by his lever, opens the fore end valve of the piston, when the air contained in the tube rushes through the piston and hollow support into the vacuum main, and the tube, with the train, is propelled by the pressure of the atmosphere, with a force corresponding to the degree of vacuum and sectional area of the tube—the longitudinal opening on the under side of the tube passing the hollow stems without friction, by means of small wheels, arranged in each horizontal piston. As the tube advances over the pistons it successively lets in air at front, and discharges it through the pistons, and thus the train is propelled by a succession of impulses, each of 100 yards duration, the speed being under the perfect control of the driver. When it is required to stop or reverse the train, the driver shifts his levers, and produces a vacuum at the opposite end, which then becomes the back, and the train is propelled in a contrary direction. Under one arrangement it is proposed to divide the tube by a valve into two parts, forming, as it were, two tubes of half the length—thus doubling the power, where it is necessary, for severe inclines.

The advantages which Mr. Weston claims for this system of pneumatic railway propulsion over the old system are, perfect command by the driver over the direction and speed of the trains; greater facilities for starting, stopping, and reversing, without the use of breaks, which are entirely superseded; the employment of more or less power, according to the gradients of the line, and its consequent economy; its certainty in action, and its undoubted safety. The tube can be employed as an air-pump, to retard the train in descending inclines, using the surplus force of gravitation as a power for helping to create, increase, or maintain the very power by which

the trains are propelled; and thus by this system the aggregate consumption of power on undulating lines will be reduced to nearly the same as if they were perfectly level. Notwithstanding the longitudinal valve is here employed, it is only in action at short distances of 100 yards, and Mr. Weston estimates the leakage at not more than 2 per cent. The stationary engines, either worked by steam, wind, or water, may be fixed at any distances, as the circumstances of the stations may require, and the amount of power required is estimated at one-fifth of that on the old plan.

Original Correspondence.

ON THE USE OF CAUSTIC LIME, INSTEAD OF LIMESTONE, IN BLAST-FURNACES.

SIR,—In estimating the profits realised by the use of lime instead of limestone in blast-furnaces, in our paper in the *Mining Journal* of the 4th Jan., we have stated that the actual increase of profits secured by this innovation is from 25,000 fr. to 30,000 fr. (10000. to 12000.) per annum. We omitted to add that this increase of profit was for one blast-furnace only—that on the present working at Ougrée being above 30000. a year. Since our paper was written, lime has been employed in another large coke furnace, and immediately the daily production rose from 17½ to above 20 tons, the consumption of coke being very much diminished. We shall be happy to furnish any further information, if requisite, to such of our readers as may wish to apply this innovation; every one is at perfect liberty to do so—the use of lime in lieu of limestone not being a patented invention. Ougrée, Jan. 12. G. MONTEFIORE LEVI; EMIL SCHMIDT.

THE COPPER TRADE.

SIR,—The letter on the copper trade, in last week's *Journal*, from Mr. W. Birkmyre, appears to me a very one-sided affair, tending greatly to mislead your readers as to the present condition and prospects of the copper trade of England—apparently written with a view to depreciate in the eyes of the public the mining interests of Britain, and a morbid attempt to prove that we are gradually being elbowd out of the markets of the world by those whom a thorough modification of trade and the Navigation Laws has signally benefited as well as ourselves. The writer begins by attempting to prove that the copper trade of England is about being reduced to very little importance, as compared with the copper produce of other countries, because, forsooth, the imports of copper have increased in the two last years, and that the last year's returns exhibited the astounding amount of 2836 tons, and manufactured goods to the tune of 25,338. Your correspondent most unfairly takes care not to mention the fact, that this foreign copper is to a very small extent held for home consumption. The larger portion generally is again exported; and of the 25,338, worth of manufactured copper in the year mentioned, there was only retained for home consumption 4031. 11s. 10d.; while our total exports of British copper amounted to 20,481 tons, producing considerably more than 1,500,000. sterling. The increase in the imports has, doubtless, arisen from the impetus given to trade and commerce by our free-trade system—the copper is paid for with British manufactured goods, and is evidence of prosperity rather than adversity. The exports of British copper for the year ended January 5th, 1849, only amounted to 13,460 tons, being a decrease, as compared with the previous year, of 1676 tons—a decrease easily accounted for, when we consider the blow which foreign commerce received from the general civil outbreaks which occurred in all the continental states; a paralysis from which it is only surprising that it is as soon revived. The increase of exports of British copper, for the year ending Jan. 5th, 1850, being, as above-stated, 20,481 tons, exceeded those of 1848 by 7021 tons—a state of things not very stoutly supporting your correspondent's assertion, that "the copper trade of England is becoming of very little importance."

Again, in his attempts to depreciate the copper-producing powers of Cornwall and Devon, he is most unfortunate or unfair in his selection of dates and amounts. Instead of giving us a fair view of eight or ten successive years, he takes the highest productive year, ending June 30, 1839, as a maximum, producing 159,214 tons, of the value of 932,090.; and for a minimum he again gives us the year when commerce was at a standstill, and copper down to 78. per ton, preventing the sending the ores to market, where they could be held back—viz.: that ending June 30, 1849, when the produce was only 144,983 tons, value 717,917., showing a falling off of 214,173. Your correspondent might, in the 11 years which have elapsed since 1839, have found returns of not quite so discouraging a character; and he had only to refer to the first *Journal* of the present year, when he would have found that the produce of 1850 was 155,025 tons, realising 840,440. 16s.—being a decrease, as compared with 1839, of 4189 tons, and 91,649., instead of 214,173.

Your correspondent then jumps to the conclusion, that no one can be surprised at the enormous decrease who knows the wasteful manner in which the Cornish ores are smelted, to which, in the conclusion of his letter, and to Devon and Cornwall railways, he attributes the decrease of what, in the commencement, he charged to the alteration of the law. I trust these few observations will neutralise the injurious tendency of the communication referred to, and show that the copper trade of England is not in that deplorable condition your correspondent would represent it. Redruth, Jan. 22. G. R. WILLIAMS.

ROPE FOR MINING—THE LARGE COAL FOR THE EXHIBITION.

SIR,—The following will be interesting to the proprietors of mines and others in the habit of using rope:—The rope with which I raised the large specimen of coal, intended for the Exhibition, was manufactured by Mr. W. A. Chubb, of Woodpark, Devonport; a flat one, 5½ in. broad, and of the usual thickness. It held the coal suspended at a depth of 200 yards, and for three minutes, with the enormous weight of 5 tons upon it. The rope having been so severely tested, without receiving any injury, I think, in justice to Mr. Chubb, the circumstance should be known. Hange Colliery, near Tipton, Jan. 17. DANIEL GEORGE ROUND.

THE SUSPENSION BRIDGE AT TWERTON.

RESPECTED FRIEND,—Having lately visited Bath, I took the opportunity of inspecting the inflexible suspension bridge at Twerton, which I designed and executed about 12 years ago, and had the satisfaction of finding it in as perfect condition as when erected, minus the wear and tear, which was very trifling. But what excited my surprise most was the fact that a gas main is constructed along the floor of the bridge, close to the railway; I think this circumstance fully justifies me in calling it an inflexible suspension bridge, and confirms Gen. Sir C. Pasley's opinion—"That it is the firmest and best suspension bridge ever constructed, especially for railway purposes." A model of this principle is at your office, as well as a very splendid one of the proposed Clifton wrought-iron bridge. Stangate, Lambeth, 1st mo. 20. THOMAS MOTLEY.

ELECTRIC TELEGRAPH BETWEEN ENGLAND AND IRELAND.

SIR,—Permit me to draw the attention of your readers to a consideration of the best means for establishing a telegraphic communication between England and Ireland. Since it is admitted to be a subject of great importance at the present time to connect these two portions of the United Kingdom more closely together, which would have the effect of making Ireland the highway between the north of Europe and the American continent, and considerably expedite the conveyance of intelligence between the great marts and centres of civilisation of the modern world, I trust that the authorities will not decide, "on foregone conclusions," upon any route until due attention has been given to the suggestions emanating from different members of the profession. It has been proposed to lay down telegraphic wires along the bottom of St. George's Channel between Holyhead and Howth, and thereby connect the electric telegraph on the North-Western Railway of England with that on the Howth branch of the Dublin and Drogheda Railway, thus following what is said to be the shortest practicable route between London and Dublin. Now, it appears to me that this is not by any means the most feasible way of carrying into execution the desired object. On a former occasion, when advocating the establishment of a direct line of railway through Ireland, so as to shorten the journey between London and New York, I maintained that as a general rule the great object to be achieved in laying out a line of communication between two distant places, was to find the maximum portion of route that can be traversed on land, and the minimum by sea, subject, of course, to such modifications as particular circumstances might require. This rule may be taken in a more extended sense, as applicable to the conveyance of news by electricity, where a *detour*, no matter how great, causes no appreciable delay in the transmission of information. It must be borne in mind that every additional mile that has to be traversed along the bot-

tom of the sea adds innumerable difficulties to the undertaking in laying down, in protecting, and repairing the wires, which do not increase in a simple arithmetical progression, but are augmented incalculably as the distance becomes greater. Instead, then, of laying the wires from Holyhead to Howth, which are nearly 60 miles from one another, I would propose that they should be down between the Mull of Cantire and such point on the Irish coast as lies nearest to the Mull, somewhat to the east of Fair Head. By this arrangement the distance by sea would be reduced to about 15 miles. From London to Glasgow the electric telegraph is already complete, and all that remains to be done is to carry it on to the Mull of Cantire, either by wires laid across the Frith of Clyde and Loch Fine, or on bridges thrown over those estuaries, similar to the one erected at the Menai Straits. From Fair Head to Belfast the communication could easily be effected at a small outlay, while from Belfast to Dublin the electric telegraph must, in any case, be laid down for the respective convenience of those two important cities, so that the expense to be incurred by the adoption of my plan would be only that of establishing the telegraph from Glasgow to Belfast. The line of route submitted, I believe, would be much better than by way of Holyhead and Howth, as the wires in the shorter sea line would be less liable to casualties, and, consequently, the expense of maintenance would be considerably reduced, while the first cost of establishment, most likely, would not be much more.

January 17.

W. H. VILLIERS SANKEY, C.E.

SAFETY LAMPS.

SIR,—It appears that my idea of a double gauze was anticipated by Dr. Murray, who proposes a guard of Muscovy glass, to prevent the effects of currents of air. Still the Davy lamp is inferior to the Clanny, of which it is an imitation; for the gauze causes a degree of obscuration, which is not the case with the Clanny lamp. All mines should be well ventilated; but a real safety lamp is also necessary, especially in some of the very fiery mines.—J. J. LAKE: Portsmouth January 20.

STEAM-BOILER EXPLOSIONS.

SIR,—I think your correspondent very properly advocates the necessity of two safety-valves to every steam-boiler. These should be truly so, and not what they now are—misnomers. The reflection has often painfully impressed my mind that, where life is most in jeopardy, and personal risks most numerous and serious, there mechanical ingenuity and contrivance, and the entire apparatus of mental appliances, seem most defective—steam-boiler explosions, the working and ventilation of coal mines, the life-boat, saving from shipwreck, and others, too, graphically illustrate the assumption.

Is the question in these cases helpless—hopeless? By no means, though it should seem as if it were. I, in my humble measure, at least, have no blame to bear. I have done what I could. Perhaps, the task has been a thankless one, certainly attended by great pecuniary sacrifices to me. Has the sudden emission of steam at a high temperature into the cold atmosphere nothing to do with the explosion of steam-boilers? May not the gagging of the valve be dependant on a similar cause? This is a curious question, and one which has seriously engaged my attention. In order to obviate this sudden revulsion, I propose to pass the waste, or surplus steam, previous to its issue by the safety-valve, through a pipe, or pipes, traversing the hot water in the steam-boiler. The diagram will illustrate my plan and views. J. MURRAY. Broadstone, Stranraer, Jan. 13.

HEAT AND COLD.

SIR,—Perhaps the truly interesting researches of Dr. Faraday may, eventually, illuminate the mysterious agencies of heat and cold. I remember I was much interested, many years ago, in some experiments I made in reference to researches connected with this question. *Acids* are electro-negative, and attracted by the positive electrodes of the voltaic circle; and *alkalies* are electro-positive, and, consequently, attracted by the negative electrode. In my experiments on vegetable colours, I found that heat produced a change similar to that of an acid; and cold, a change of colour, identical with that of an alkali. Thus blue litmus paper became red when heated, and had its original blue colour restored, as well when exposed to the cold superinduced by radiation at night, as acted on by an alkali. This was also the case with the blue tincture of cabbage, and corresponding changes occurred with turmeric and Brazil brenns. Broadstone, Stranraer, Jan. 22. J. MURRAY.

DR. RAMADGE AND CONSUMPTION.

SIR,—Some time ago, the topic of pulmonary consumption was mooted in the *Mining Journal*, and that in connection with Dr. Ramadge. I have lately had an opportunity of glancing at Dr. Ramadge's *Translation of Lannec on Auscultation*—in this instance, clearly introduced to recommend Dr. Ramadge's peculiar mode of treatment. That, however, is a question I have nothing to do with. I shall only say that the conclusion from which Dr. Ramadge seems now anxious to escape, was not so meant—namely, that his plan of treatment consisted, in part at least, of superinducing *asthma*, &c., as auxiliaries for the suspension of the march, or tendency, of the system towards pulmonary consumption, which, as well as hemorrhoids, is supposed to keep that tendency in abeyance. Most certainly it was generally so understood by medical practitioners.

In that work there is a most unprovoked, and unworthy and unwarrantable sneer and attack on Dr. Baron, F.R.S., the intimate friend and associate, and biographer of the illustrious Jenner—a man whose profound investigations and researches in tubercular consumption, and whose works are so highly appreciated by the *savans* of all countries, might have well screened him from "envy, malice, and all uncharitableness;" but none are safe from "The strife of little tongues."

A most curious incident occurred in my own case, in reference to my work on *Pulmonary Consumption*, 2d edition, 8vo. A London publisher had the audacity and reckless assurance to publish, without consulting me in any way, a 1s. volume, entitled, *Ten Minutes' Advice on Consumption*, by a Physician! It contained the essence of my discoveries, which had in the hands of an eminent surgeon, &c., proved most successful; and not only was the "pith and marrow" of this work there eliminated, but my *ipsissima verba* employed!—not a single word changed in any wise. I employed a barrister to suppress the nefarious act. J. MURRAY. Broadstone, Stranraer, Jan. 6.

GAS RETORTS OF CLAY.—At the South Metropolitan Gas Works, in the Old Kent-road, there are now working two furnaces of retorts, with five in each, which have been uninterruptedly in action for 17 months. These retorts are made of fire-clay, are D shaped, 7½ ft. long, 20 in. wide, by 7½ in. high. Each retort is calculated to have produced 1,800,000 cubic feet of gas, and there is every prospect of their making 2,000,000 ft. each of gas before they are worn out, without any increase in the expenditure of fuel. The manufacturers of these excellent specimens of fire-clay retorts are Messrs. Cowen and Co., of Blaydon Burn, near Newcastle-upon-Tyne.

THE NEW ROOFING—PORTABLE COTTAGES FOR MINERS.—At the last show of the Smithfield Cattle Club, model cottages, covered with felt roofing, were exhibited by Messrs. Croggon and Co., of Dowgate Hill, which were pronounced by the general visitors as well suited to persons engaged in mining pursuits, and those whose calling leads them to require temporary erections, such as agriculturists, builders, and itinerants. The cottages are of various sizes, and in the principle of their construction, although apparently simple, exhibits much skill and contrivance. To show at once the utility of this invention, and how well it is suited to the wants of many, we need only say that a cottage of two rooms, capable of affording comfortable accommodation to an ordinary family, may be carried entire for any number of miles in a one horse cart. To the advantage of portability, we may also add that of durability and cheapness, for, on inquiry, it appears that the expense is so low that any man in regular employment may become a proprietor of a tenement for himself and his family. It would be well, indeed, if the pamphlet of the firm, in which the principle of the cottage and the qualities of felt as a roofing are explained, were extensively circulated among all classes of the community, as we are persuaded that the economy and comfort of the cottage as a dwelling for the poor, and of the other as a roofing material, only require to be known to be generally appreciated. The boiler felt, by which a saving of 25 per cent. is effected in the consumption of fuel in the steam-engine, is already well known to engineers, and is highly recommended by the profession.

RAILWAY AND MINING OFFICES, No. 3, CASTLE-TERRACE, EXETER.—Mr. JOHN JURY, RAILWAY AND MINING SHARE-BROKER, OFFERS his SERVICES to CAPITALISTS in the PURCHASE or SALE of ANY DESCRIPTION of PROPERTY; and will be happy to point out a selection of any stock as appear the most eligible, from data that can only be arrived at by those who give an undivided attention to the subject.—Every information afforded (either in person or by letter) to capitalists wishing to invest or exchange their securities, and sales or purchases effected upon the best terms, and at one-half the commission usually charged.

REGISTRY FOR THE SALE AND PURCHASE OF MINING SHARES.

DURRANT & CO., No. 58, LOMBARD-STREET, LONDON.
Shares for disposal:
Devon Great Consols
Great Wheal Sheba
Wheal Venton
Wheal Tom
Holmbush
Dyfnwy
West Caradon
Wheal Trescoll

N.B.—Statistical information furnished on British and Foreign Mines.—No Charge made unless business be transacted.

MINING SHARES.—Mr. JOHN CREFT, No. 1, ROYAL EXCHANGE-BUILDINGS, LONDON, OFFERS his SERVICES, on COMMISSION, to BUY and SELL MINING SHARES, and will select for capitalists those with the greatest chance of success, and take pleasure in furnishing a list of prices, to gether with all particulars.

MINING OFFICES.—48, THREADNEEDLE-STREET, LONDON.—Messrs. THOS. FULLER & CO., beg respectfully to call the attention of CAPITALISTS to MINING, as being the most SAFE and PROFITABLE MEDIUM of INVESTMENT, and are in a position to BUY and SELL in all the DIVIDEND-PAYING MINES, and have on hand several other Mines, which will insure to capitalists the most safe investment, and will pay from 15 to 30 per cent.

MINING OFFICES, ST. MICHAEL'S CHAMBERS, ST. MICHAEL'S ALLEY, CORNHILL, LONDON.
Mr. R. TRIPP, MINING AGENT, has FOR SALE SHARES in most of the best DIVIDEND MINES, also in NEW ones, having present and prospective advantages.

MINES.—MOLYNEUX & CO., 6, FINSBURY-PLACE, SOUTH, and 6, WEST-STREET, FINSBURY-CIRCUS, have SHARES FOR SALE in DIVIDEND-PAYING and OTHER MINES, which will ensure to capitalists the safest and most unexceptionable investment.—Office hours from Ten to Five o'clock.

MESSRS. TREVARTON AND CO., MINING SHARE DEALERS AND BROKERS, 5, ST. JAMES'S-STREET, PALM-MALL, LONDON.

MESSRS. BOXALL & CO., MINING SHARE DEALERS, 5, CROSSBY HALL CHAMBERS, BISHOPSGATE-STREET.

WEST BEAM TIN AND COPPER MINE, in the parish of ASHBURTON, DEVONSHIRE.
ON THE COST-BOOK SYSTEM.

In 2048 shares.—Deposit £2 per share—£1 for working capital, and £1 per share for the purchase of the mine, machinery, materials, &c.

Term: 21 years.—Dues: 1-15th.

This sett is very extensive, being about 2 miles long, from east to west, and half a mile wide. It is directly west of, and immediately adjoining, the celebrated Old Owlcombe and Wheal Union Tin Mines, which have produced immense quantities of tin, and the lodes of which mines run through this sett for about a mile in length.

The locality was formerly one of the most celebrated in the kingdom for tin, and was most extensively worked by the tin streamers; but their operations were merely superficial, and the more perfect machinery of modern times has never been adequately tried in this district.

There are five known tin lodes and one large copper lode in this sett, but only one of the lodes (a tin lode) has been worked; and from this one lode £10,600 worth of tin was raised and sold by the late company.

The mine was worked by a company from the year 1836 to 1847, when, in consequence of the death of some of the principal shareholders, and the inability of the rest to prosecute it with sufficient spirit, the landowner purchased the remainder of the term, with all the machinery and materials; and he is so satisfied with the undertaking, that he is prepared to take a large interest in a new company.

The late company spent about £11,000 or £12,000 in buildings, machinery, and works; the greater part (about £10,600) of which was repaid to them by the produce of one lode, though worked to no greater depth than 40 fathoms.

The mine was worked by water-power, but not effectually, in consequence of there being an insufficient supply of water in dry seasons. There is, however, sufficient water-power, at all times, to stamp and dress the ores, but a steam-engine will be requisite to work the lodes effectually.

The copper lode, which runs through the sett, is of immense size (12 to 14 ft. wide); and branches of copper, dipping towards the sett, have been worked in the adjoining mine, and have been found to be very rich.

The mine is situated on the junction of the killas and granite—a situation most congenial for minerals, and in which some of the richest mines in the kingdom have been found. Besides the lodes before mentioned, there are several tin lodes in the granite, which have been extensively stream-worked by the ancient miners, and the backs of which are visible.

The former company erected a counting-house, blacksmith's shop, carpenter's shop, material-house, burning-house, stable, stamp-house, and sheds, with all the fixtures for tin dressing; and the whole of which a new company will have the use of, at a moderate rental of £40, and will thus save a very large expenditure. Since the former company ceased to work, above £700 worth of tin has been raised by tributers, and there are several of the former tributers both willing and anxious to take pitches, from which immediate returns may be anticipated.

A new company will commence operations under peculiarly advantageous circumstances, as all the requisite buildings, water-wheels, pumps, and machinery, are now on the mine, and there is plenty of water at this season of the year; and thus productive works can be immediately commenced, and considerable quantities of tin may be raised whilst a steam-engine is being erected.

The tin from this mine is of the richest quality, and has always produced the very highest price in the market.

The £1 per share for the purchase of the mine will include the purchase of the water-wheels, and of the pumps, stamps, and all other machinery and materials on the mine. The other £1 per share will be ample to provide and fix a steam-engine of sufficient power to place the mine in a productive, if not profitable, state; and any further call, if such should be required, will not exceed 10s. at a time.

The mine will be managed by a committee of five of the principal shareholders, in whose names the funds of the company will be paid into a London banking house.

The shares remaining undistributed may be had by respectable parties, on application, by letter or personally, to the Secretary, Mr. James Nicholson, solicitor, 90, New Bond-street, London, where a plan and reports of the mine may be seen.

REPORT OF CAPTAIN JOHN ANTHONY.

Ashburton, Jan. 13.—This mine presents an extensive field for mining operations. The mine is situated two miles from Ashburton, at and on the granite ridge of Dartmoor, in a speedy state of grey killas or clay-slate, and from which the tin in this and the old Owlcombe mines has been raised. There are six lodes running through the sett, which have been worked on the surface by ancient miners, some of them very extensively. I find only one of these lodes has been worked on by the late company; this lode has been worked to the depth of 40 fms.; a very rich shoot of tin has been raised from this lode. I find the 40 fms. level has been driven 6 fathoms on the course of the lode; the lode is from 8 to 10 inches wide, composed of capel, spar, muncie, and tin—the ground favourable for driving; there has been a cross-cut driven north from this level, to cut the great north lode; and there has been a small level cut, which was considered by the former agent to be the lode; according to my dialling, it is not the lode, the lode being near 2 fathoms further north.—The 30 fathom level: The bottom of this level has been stopped by tributers to the depth of 3 or 4 fathoms, and who raised a considerable quantity of tin; the lode is 18 inches wide, composed of capel, spar, muncie, and tin, embedded in a beautiful channel of white killas ground; there are good shoots of tin gone down in the bottom of this level.—Western end, 30 fathom level: The lode is 15 inches wide, composed of capel, spar, muncie, and tin, not worth saving at present. In the 20 fathom level west, the lode is 3 feet wide, composed of peat capel, spar, and muncie, in good ground. I think very much of the lode in this part of the mine. In the east end, the lode is 16 inches wide, consisting of capel and tin. In the 10 fathom level west, the lode is from 3 to 4 feet wide, composed of gossan, peach, capel, iron, and tin. In the east end, the lode is 18 inches wide, composed of capel, spar, iron, and tin.—In the adit end, going west, the lode is 4 or 5 feet wide, composed of gossan, peach, capel, spar, iron, and small leaders of tin—the lode not worth saving at present; the ground in this end is very favourable for driving, and, being near the junction, I strongly recommend extending this end west, to cut the channel of granite ground, where we may expect to find the lode very productive. I have examined the backs of four other lodes, one of which is a copper lode; this lode is from 12 to 14 feet wide, in the pit that has been sunk on the back of the lode; I found this lode to be composed of a most beautiful gossan, flooken, white and yellow spar, muncie, and copper. The other three lodes are tin lodes, varying in size from 4 fathoms to 4 feet wide, and are of a most promising kind, embedded in a good channel of white killas ground. It is my opinion that this mine might, by a moderate outlay, be made a very productive mine, and realise large profits to the adventurers, and in my opinion become a lasting mine. I found on the mine all the materials necessary to begin immediate work. I give you this report from notes I made some months since, at which time I forked the water myself, so as to enable me to examine her minutely. I feel perfectly confident that the mine forked and levels cleared, I could at once set pitches on tribute, and send tin off to market.—JOHN ANTHONY.

THE MINING ALMANACK, FOR 1851.—Under the especial Patronage of His Royal Highness PRINCE ALBERT, K.G., Lord Warden of the Stannaries, Chief Steward of the Duchy of Cornwall and Devon, &c., &c.—Edited by HENRY ENGLISH, Editor of the *Mining Journal*, *Mining Review*, &c. THE THIRD VOLUME of this work, containing upwards of 500 pages, will be shortly ready for publication, and, in addition to the Statistical and Tabular Matter, will contain several original and scientific papers, pertaining to Mineralogy, Mining, and the Allied Sciences, with Narratives of their Origin, History, Constitution, and Laws, with a List of their present Officers, &c., including the Royal Society, from its foundation to the present period; the Mineralogical and Fossiliferous Collection in the British Museum, will also appear. The Great Exhibition of 1851 will claim an extended space, and meet with that attention which it demands with reference to its Geological and Mineralogical Products, while the Mechanical Sciences will not be neglected, the object of the Editor being to render the *MINING ALMANACK* fully worthy of the august patronage and extended support it has met with from the public.—Price 6s.

Published by Simpkin, Marshall, and Co., Stationers' Hall-court, Paternoster-row, offices, 25, Fleet-street, where all communications to the Editor are to be addressed.

PATENT IMPROVEMENTS IN CHRONOMETERS, WATCHES AND CLOCKS.

E. J. DENT, 82, Strand; 33, Cockspur-street; 34, Royal Exchange (clock tower area). Watch and Clock Maker, by APPOINTMENT, to the Queen and his Royal Highness Prince Albert, begs to acquaint the public, that the manufacture of his chronometers, watches, and clocks, is secured by three separate patents, respectively granted in 1835, 1840, 1848. Silver lever watches, jewelled in four holes, 6s. each; in gold cases, from £5 to £10 extra. Gold horizon watches, with gold dial, from 8s. to 12s. each.

DENT'S PATENT DIPLIODESCOPE.

or Meridian Instrument, is now ready for delivery.—Pamphlets containing a description and directions for its use 1s. each, but to customers gratis.

NAP DOWN CONSOLS SILVER-LEAD MINING COMPANY.—COMBARTON, NORTH DEVON.

OFFICES—No. 53, THREADNEEDLE-STREET, LONDON.
In 3000 shares, of £3 each.—Deposit £1.

CONDUCTED ON THE COST-BOOK SYSTEM.

BANKERS—Messrs. Masterman and Co., Lombard-street, London; and the National Provincial Bank of England, Barnstaple.

SECRETARY—Mr. James Lane, No. 80, Threadneedle-street.

The following are some of the advantages under which this Company will commence operations:—

1. The lodes have been laid open to such an extent, that returns may soon be made.
2. The works are in progress of clearing, and a splendid new combined cylinder steam-pumping engine, built by Sims, of 100-horse power, with an entire set of pumps, are ready for work.
3. Labour is plentiful and coals cheap, and there are smelting-works in full operation close to the mine.

This Company may be fairly stated as one of the finest opportunities ever presented to the notice of the public for engaging in a highly profitable undertaking, at a very moderate expenditure. An extraordinary and important discovery has recently been made by shodding on the back of the main lode—nearly 2 tons of silver-lead have been raised in blocks of from 1 to 8 cwt. each. The lode, at this depth, carries a fine gossan, rich in silver; and in the captain's report of the 25th November last, he says—"On Saturday last several pieces of solid ore were discovered in ground that has never been explored—the largest piece weighing 364 lbs., and is an exceedingly splendid specimen."

In addition to the rich deposit of lead and silver with which the mine is stored, there is likewise a copper lode, of a promising description, from 3 to 3½ feet wide.

Applications for shares to be made to Mr. Thos. Allsop, stock and sharebroker, No. 1, Royal Exchange-buildings, London; Mr. James Lane, secretary, at the offices of the Company; and William Thorne, Esq., Barnstaple, Devon; or of the following brokers:—J. Davies, 38, Tower-buildings, Liverpool; E. Speakman, Exchange-chambers, Manchester; C. Beardslow, Leeds; J. Ironside, Sheffield; Messrs. T. W. Flint and Co., Hull; G. Trickett, Post-office Chambers, Plymouth—to whom all communications may be addressed, and of whom prospectuses and plans may be obtained.

SILVER VALLEY AND WHEAL BROTHERS MINING COMPANY.—CALSTOCK, CORNWALL.

In 10,000 shares, of £1 each—all paid up.—Scrip Certificates will be issued, by which shareholders will be secured from any liability.

ON THE COST-BOOK PRINCIPLE.

COMMITTEE.
S. W. DAUKES, Esq., 14, Whitehall-place, Westminster.

GEORGE TATE, Esq., Fulham.

J. W. WELBORN, Esq., 39, Albemarle-street, Piccadilly.

(With power to add to their number.)
BANKERS—Messrs. Barnett, Hoare, and Co.

SECRETARY—Mr. William Lee.

OFFICES OF THE COMPANY—3, HATTON-COURT, THREADNEEDLE-STREET.

These celebrated mines, now resumed, offer no ordinary attraction as a certain and valuable investment by exploring the silver lode—the twentieth part of which has not yet been seen, and a wide field is open for searching the tin and copper lodes in the sett, which have indications and prospects of a highly encouraging nature.

In 1835 and 1836 rich silver ores were raised, which by assay produced from 200 to 3000 ounces of silver in the ton; some of the ores were sold at 20s. the pound weight. At one period £2000 worth of silver were raised, a fortnight, by the labour of six men only; and at another, ores to the value of £5000 were raised and sold at a cost of £1500.

Dividends, amounting to £1500 a month, for several months, were paid on an capital of £500, and the shares of £5 each were sold at £1100.

About this time it became necessary to erect a steam-engine to drain the mine, for which no funds had been reserved; a call was, therefore, made, but in consequence of expensive litigation and dispute between the shareholders, coupled with most extravagant expenses, it was not responded to, which led to the sale of the materials, and the final stoppage of the mine.

The present proprietors, warned by the experience of the past, have determined to make a first and final call, which, whilst it will be ample for the development of these rich deposits, will at once preclude the necessity of any future call.

Prospectuses, containing full particulars, with forms of application for shares, may be obtained on application to Mr. Thomas Allsop, 1, Royal Exchange-buildings; or to the Secretary, at the offices of the Company, 3, Hatton-court, Threadneedle-street, London; also of the following sharebrokers:—Mr. Robert Goss, Bristol; Mr. N. Lee, Birmingham; Mr. Speakman, Manchester; Mr. John Davis, Liverpool; Mr. A. Smith, Leeds; Messrs. Allsop and Sons, Hull; Mr. B. Jones, Preston; and Mr. Trickett, Plymouth.

WHEAL GILL MINE—ST. CLEER AND ST. IVES, NEAR LISKEARD, CORNWALL.

Deposit £1 per share, divided into 1536 shares.

A great portion of which are already taken up by respectable and responsible parties.

This MINE is situated in the parishes of ST. CLEER and ST. IVE, nearly 2 miles in length, and not far from those celebrated and profitable silver-lead mines, called Trellawny, Wheal Mary Ann, and Trethane—having several similar rich lodes of lead running through the whole length of the southern part of the sett. Large rocks of silver-lead are now visible at the 16 fathom level, and can be taken away on tribute. These lodes can be cut also at the 54 fathom level, which is of immense importance.

There are also five known copper lodes to the north of the sett, of the most splendid description, with excellent cross-courses. These copper lodes are on the south-east of those very valuable and profitable mines called South Caradon and West Caradon. One lode in particular has been worked on, and contains large and rich deposits of copper ore. This ore can be also taken away at tribute in the 54 fathom level.

All practical miners in the neighbourhood of Liskeard admit that Wheal Gill is a very valuable and rich sett, both for silver-lead and copper ore; and it only requires a small capital to bring the ore to grass, and make the mine a rich dividend-paying mine. The former adventurers truly regretted the cessation of the mine, which was caused by not having sufficient steam-power at first, a circumstance too often leading to the abandonment of the richest mines in Cornwall. The present company have purchased a 70-hp cylinder steam-engine, of sufficient power to carry the mine down 200 fathoms, and many of the former adventurers have in consequence joined the undertaking, being fully satisfied of the results.

Ten years' perseverance and work, at an outlay of £15,000, has been already accomplished all of which the present company have secured from the lessees, and have that advantage, for the sum of £1500—a circumstance of vast importance, and almost unparalleled. The only reservation to the owners of the sett being 536 shares, according to the conditions of the cost-book.

The owners of the mine have thought proper to take the advice of the most talented mining men of the age, and have called in the following parties to inspect the same:—Evan Hopkins, Esq., of 13, Austinfriars, London; Captain J. Kemp, of Trellawny Mine; and Captain Richards, of Trethane, as well as several other practical miners; and annexed are their reports, which must at once satisfactorily prove to every one the character of Wheal Gill, and her qualifications as a valuable and rich mining property.

Gentlemen are requested to purchase a few shares as requested to apply forthwith, as under; but it is distinctly understood, in making such application, a reference must be forwarded to—James Lane, Esq., 52, Threadneedle-street, London; the Devon and Cornwall Banking Company, Liskeard, Tavistock, Exeter, and Plymouth; Messrs. Sanders, bankers, Exeter.—The calls will not exceed £1 per share every two months.

REPORT OF EVAN HOPKINS, ESQ.

"This mineral property is 'situate in a valley, a few miles north of the Trellawny Lead Mines. The general character of the formation is a variegated clay-slate, traversed by numerous light blue veins, running from the Trellawny Mines, and presenting every indication in structure, composition, configuration of the valley, and the gossan, for making large bunches of lead ore in depth, but more especially southward. On the west side of the main cross-course the rock becomes more hornblende, and the east and west lodes have produced many tons of copper ore, with sulphure of zinc; a large bunch was also found in the east side of the valley. This, as regards lead, a most important set, and deserving immediate attention; and although it predominates in lead and zinc, yet large masses of copper ore may be found westward from this point within the limits of the sett."
EVAN HOPKINS.

REPORT OF CAPTAINS R. RICHARDS AND J. KEMP.

"We have gone over this sett, and find therein two excellent lead lodes, which will produce abundance of silver lead at a very shallow depth, inasmuch as large rocks of lead may now be broken in the 16 fm. level. These lodes are not far from the rich mines of Trellawny and Wheal Mary Ann. They are similar, and can be cut at once at the 54 fm. level; so that you have a good lead mine at once. The copper lodes could only be seen on the backs, where they have a very good appearance; and we have been informed, by parties who worked on the mine last, that there is a fine course of copper ore in the bottom level, the last opened to the back, in places which would show that most promising part to commence spirited operations on; this lode is about half a mile east of the Trellawny lode, and is running nearly parallel with it. We had an opportunity of seeing the back of the copper lode about 60 fathoms from the engine shaft, where it contains a great quantity of fine gossan, capel, zinc, and rich spots of copper ore, altogether a large and very promising lode. From what we have heard and seen of the old mine on this lode, together with the two lead lodes and the work already done—viz., shafts sunk, levels driven, &c., we consider Wheal Gill a fine speculation."
R. RICHARDS, Trethane Mine.
J. SEYMOUR, Trevelth; J. SPARGO, Great Sheba; H. TAYLOR, West Caradon.

REPORTS OF CAPTAINS R. RICHARDS AND J. KEMP.

"We have carefully surveyed the entire of this sett, which is a very extensive one, and find there are three lodes running through it, one of copper and lead, and two north and south courses, or lead lodes. The grounds about these lodes is a light blue killas, and in places it is highly mineralised. We can say but little of the eastern lead lode, as the pit where it has been opened on is full of water. We saw, however, some flooken, quartz, &c., which was broken from this lode, and judging from its appearance, should say it is well worthy of trial, the ground being very congenial for lead, and we are informed that the lode is a large one. The western lead lode is about 2½ feet wide, composed of capel, quartz, and gossan—a very promising lode. We would recommend that this lode be first opened to the back, in places which would show that most promising part to commence spirited operations on; this lode is about half a mile east of the Trellawny lode, and is running nearly parallel with it. We had an opportunity of seeing the back of the copper lode about 60 fathoms from the engine shaft, where it contains a great quantity of fine gossan, capel, zinc, and rich spots of copper ore, altogether a large and very promising lode. From what we have heard and seen of the old mine on this lode, together with the two lead lodes and the work already done—viz., shafts sunk, levels driven, &c., we consider Wheal Gill a fine speculation."
R. RICHARDS, Trethane Mine.
JOSEPH KEMP, Trellawny Mine.

PERMANENT ENLARGEMENT OF THE "MORNING ADVERTISER."

On and after the 4th of FEBRUARY, the MORNING ADVERTISER will be permanently enlarged to a DOUBLE SHEET, of the same size as the Times, to which journal it is now the next in circulation among the daily papers.

The proprietors of the *Morning Advertiser* have made the most liberal and comprehensive arrangements, both at home and abroad, for rendering their journal as complete as possible in its various departments. They have appointed able and active correspondents in all parts of the continent, in America, and in the leading towns of Great Britain and Ireland. A great accession of talent has also been secured for the Editorial columns of the paper; while every attention will be paid to the literature of the day. The sporting department will be confined to "Vox," confessedly the most eminent sporting writer of the age. With regard to general intelligence, the arrangements which have been made will, the proprietors feel assured, render their journal all that can be desired. The *Morning Advertiser* is thoroughly independent in its principles. It is wholly unconnected with Governments and parties, and is the strenuous advocate of the cause of popular progress. It has peculiar means of access to important political information—in proof of which the proprietors refer to its columns for some months past, and to the great extent to which quotations are made from it by the metropolitan and provincial press.

The *Morning Advertiser* is published every morning at 10, Fleet-street, in time for the earliest trains.

* Orders received by all newspapers.

WHEAL ENYS TIN MINE, WENDRON, CORNWALL.

—Held under lease for 21 years, nearly 20 of which are unexpired, at 1-15th dues; to be reduced to 1-20th as soon as an engine shall be erected.

Divided in 1070 shares, and conducted strictly on the Cost-book System, under the superintendence of a Committee.

Mr. JOHN TRETHOWAN, Little Falmouth, Purser.

Messrs. TREWEDY & CO., Falmouth, Bankers.

WHEAL ENYS MINE, held under lease, from John Samuel Enys, Esq., of Enys, is situated at POKKILLS, in the parish of Wendron, which is almost unnecessary to state is one of the richest and most extensive tin districts in Cornwall. It extends about half a mile from north to south, and nearly one mile from east to west, on the run of the extraordinary number of 29 lodes, which have all produced tin from surface, to the adit level; some of them in very large quantities.

The mine has been worked from time to time by various parties of poor adventurers, who unfortunately never possessed means to erect machinery, with the exception of the last party, who worked between 30 and 40 years since. These men managed to erect a water-wheel, on Trevanno and Buck's Lodes, which was worked successfully and profitably during the winter months; but in summer they had no water at surface, although too much in the mine to be kept under effectually by horses. With even these disadvantages they persevered, sank several fathoms below the adit, returned large quantities of tin, and when ultimately obliged to abandon the mine, left, as stated by old men, who worked there up to that time, a rich bottom of tin, 40 fathoms in length.

From that period nothing has been done, until about four years since, when the present company obtained the grant and subsequently the lease.

Up to the present time, they have cleared, secured, and continued the adit at a considerable expense (which is about 22 fms. from surface) throughout the sett. They have also cleared and secured several shafts, and driven cross-cuts, to intersect the lodes, which have been invariably found worked away at that level; but even from arches left by the old men, they have returned £400 worth of tin, in quality not to be excelled in the country, thus confirming all traditions respecting richness of the lodes. A still farther and stronger corroboration will be found in the fact, that every burrow (and the sett is covered with them) will pay for returning, indeed, will set on a moderate tribute, provided the water be brought to surface, which by aid of an engine, can be easily accomplished; thus clearly proving that immense quantities of tin must have been raised at former workings on the backs of the lodes. In fact, there is no part of the sett which does not work tin, or strong indications thereof, on removing the most earth.

Some of the parties who had held nearly half the mine, who were considerably in arrears, and who could not possibly contribute towards the necessary fund for effectually prosecuting the mine, have been compelled to relinquish the same, which the present proprietors have accepted, releasing the defaulters from all claims on them; which interest (500 shares) is now offered to the public at 30s. per share, free of all liabilities to the present time, in order to cover a portion of the loss, and to secure the co-operation of persons to whom the comparatively trifling amount required to bring the mine into full and profitable operation, will not be an object of very great consideration.

As soon as the shares are disposed of it is intended to erect a 36-in. cylinder steam-engine; and by a very liberal calculation the utmost capital required for engine, pit-work, necessary erections, and for putting the mine on foot, without even the adit, will not exceed £3000; but taking into consideration the certainty of raising tin to meet at least a part of the working cost, immediately on getting into whole ground, not more than £2000 will be required, and there is no hesitation in stating the conviction that with this outlay, Wheal Enys will prove to be one of the best, most profitable, and most lasting mines in the country. This is the unanimous opinion of every person who knows the locality, or has visited the mine, and the inspection of practical men, on behalf of any person, disposed to purchase is earnestly invited, for which every facility will be afforded, on application to the purser, at Little Falmouth, Cornwall.

Immediately the allotment shall be completed, a general meeting of adventurers will be convened, of which due notice will be given, for the purpose of ordering a warrant, and deciding on the amount of calls to be made, which after the engine shall be paid for, will not probably exceed 5s. per share every three months.

Early applications for not less than five shares, may be addressed by Mr. Trethowan, the purser, at Little Falmouth; to Messrs. T. Leeds and Son, St. Anne's, Manchester; Mr. W. Fenton, 5, White Hart-court, Lombard-street, London; Mr. John Davies, Tower-buildings, Liverpool; Messrs. T. W. Flint and Co., Hull; or to Mr. Williams, accountant and mine broker, Green Bank-terrace, Falmouth.

AGENTS' REPORTS.

The following are extracts from reports of mining agents, who have inspected the mine:—

Capt. RICHARD EUSTICE, of Stray Park Mine, says—"Wheal Enys is in granite, with a beautiful clay-slate course, running through the sett, near Trevanno and Buck's Lodes."

"There is no tract of land, to my knowledge, in the county, so abundant in mineral veins, lying together, in such a convenient position for a well-arranged system of mining, and so situated as to render a small steam-power sufficient for the proper drainage of the whole."

"£1000 will be sufficient to provide steam-power and pitwork for draining the mine; and for a few months, a further outlay of from £70 to £80 per month for labour and materials (without taking into consideration the tin you must raise), immediately on getting under the old workings, or the burrows, which will pay for dressing, if you bring the water to surface; a new mine will be opened, which will pay for dressing, and I sincerely believe the outlay, and ultimately realise great wealth."

"I have no doubt, will quickly repay the outlay, and ultimately realise great wealth."

"There cannot be a doubt, that Wheal Enys, properly worked, will prove one of the most profitable mines in the county."

Capt. MARTIN and BARNETT say—"When the last party abandoned the mine, about 40 years ago, from want of machinery, they left in the bottom level, on Trevanno lode, a rich bottom of tin, 40 fms. in length; very rich courses of tin were also left from the same cause on Buck's lode."

"The water from the greater part of the lodes can be drained by a 30-inch cylinder engine, which can be erected for about £600. Clearing and securing shafts and levels, with necessary erections, will require about £1400 more; so that a capital of about £2000 will make this one of the most profitable and lasting mines in the county."

"By draining the water to surface you will be enabled to dress the burrows, and return from them sufficient tin to pay the monthly cost of working the engine."

Capt. MICHAEL W. MARTIN says—"Had I not inspected Wheal Enys Mine, I would not have believed it could have presented such prospects of success. Several of the lodes, particularly Trevanno and Bucks, have been completely worked away, at and above the adit level, which is about 22 fathoms from surface, and the two above-named a few fms. deeper, by means of a water-wheel (I consider this to be beyond a speculation) and if you wish to work your mine profitably; lose no more time, put up immediately a small steam-engine, and I sincerely believe your wishes will be speedily accomplished. I find you have returned from arches left by former parties nearly £400 worth of tin; in that connection with the immense excavations, as well as the burrows which will, I believe, give a handsome profit to the adventurers, if they bring the water to surface, must convince every person acquainted with mining, that tin to a very great amount, must have been returned from the backs of the lodes; and that you have only to go deeper to obtain it in much larger quantities. From the Bissos tin bill of the 21st inst., I perceived you obtained at the rate of £54 per ton for your tin, which is sufficient proof of its quality, as well as what you may fairly expect at greater depth."

TREMAR COPPER MINE—ST. CLEER, CORNWALL.

In 1024 shares.—Deposit £1 per share.

PURSER—Mr. WILLIAM CHANNING, 7, South-street, Exeter

PRICES OF MINING SHARES.

It being difficult to obtain a correct knowledge of all the mines in our list, we trust that agents, and others interested, will assist us, by forwarding any additions, or corrections, with which they may be acquainted—our object being to present it as accurate as possible. We have also added a column to note the actual business transacted; but which, without the constant assistance of brokers and agents, cannot become so complete as we could wish. The desirability of such a record is generally admitted, and we invite the co-operation of all parties concerned, in rendering it perfect.

Shares.	DEVON DISTRICT.	Paid.	Last Price.	Transactions.
2000	Aylesborough (tin), Sheepshead	2	6 1/2	7
4000	Bodmin United (copper), Tavistock	2 1/2	6 1/2	7
1200	Birch Tor and Viller (tin), Dartmoor	10 1/2	4	...
1024	Borough Park (silver-lead), Plympton	1	3 1/2	3 1/2
1500	Briddford Wheal Augusta (lead), Briddford	1	—	—
256	Briddford Consols (lead), Christow	1	—	—
4000	Devon and Courtenay Consols (copper)	1 1/2	2 1/2	2 1/2
1024	Devon Great Consols (copper), Tavistock	1	2 1/2	2 1/2
768	Devon Great Tincons (tin), North Bovey	1	6	...
256	East Birch Tor (tin), North Bovey	1	6	...
2048	East Crowndale (tin), Crowndale	7 1/2	2 1/2	2
4000	East Crowndale Junction (copper)	1	—	—
9000	East Tamar Consols (silver-lead)	1 1/2	1 1/2	1 1/2
2048	East Wheal George (copper), Walkhampton	1	10	...
512	East Wheal Josiah (copper), Tavistock	1 1/2	2	1
4000	East Wheal Russell (copper), Tavistock	1 1/2	6 3/4	4 6 1/2
1024	Exmoor Eliza (copper), South Molton	2 1/2	2 3/4	5
1500	Henock (silver-lead), Henock	2 1/2	2 1/2	2 1/2
1024	Kingzett and Bedford (lead and copper)	3 1/2	2 1/2	2 1/2
1742	Lanheroes Wheal Maria (copper & tin)	1 1/2	1 1/2	1 1/2
3000	Nap Down (silver-lead), Combarston	2	—	—
1024	New East Crowndale (copper and tin)	2	—	—
1024	North Wh. Robert (copper), Walkhampton	2	2	2 1/2
1000	Peter Tavy and Mary Tavy (copper)	2 1/2	8	...
512	Plymouth Wheal Yealand (tin), Plymouth	6 1/2	6	...
2048	Rannaford Coombe (tin)	2 1/2	3 1/2	4
256	South Friendship Wh. Ann (copper & tin)	30	28 30	...
256	South Molton (lead)	12 1/2	12 1/2	...
1024	South Plain Wood (copper), Ashburton	3 1/2	6 7	7
9000	South Tamar (silver-lead), Bear Farris	1	2 1/2	2 1/2
9000	Tamar Consols (silver-lead), Bear Farris	1	5 1/2	5 1/2
657	Tavy Consols (copper), near Tavistock	8	10	3
1024	United Mines (copper and tin), Tavistock	10	10	...
1024	West Downs (copper and tin), Whitechurch	2	2 1/2	2 1/2
1024	West Wheal Friendship (copper)	3	3 1/2	2 1/2
4000	West Wheal Russell	1	—	—
1070	Wheal Adams (lead), Christow, Exeter	13 1/2	16	...
256	Wheal Benny (copper), Calstock	19 1/2	—	—
1024	Wheal Carpenter (tin and cop.), Gwennap	1	2 1/2	2 1/2
1024	Wheal Crober (copper), Tavistock	2 1/2	3 1/2	3 1/2
1024	Wheal Embley (antimony and copper)	4 1/2	5 1/2	5 1/2
1024	Wheal Farnsley (copper), Tavistock	4 1/2	5 1/2	5 1/2
764	Wheal Franco (copper), near Tavistock	13 1/2	13 15	14
126	Wheal Friendship (copper)	120	120	...
1024	Wheal Hamlyn, near Oakhampton	1	—	—
2048	Wheal Harris (lead), near Tavistock	1	—	—
2000	Wheal Langmaid (lead)	1	—	—
1024	Wheal Mary Ann (copper), Bridestow	—	1 1/2	...
5000	Wheal Providence, South Sydenham	—	2 1/2	2 1/2
1024	Wheal Russell (copper), Tavistock	4	6	6

EAST CORNWALL DISTRICT.

Shares.	EAST CORNWALL DISTRICT.	Paid.	Last Price.	Transactions.
3650	Bawden (silver-lead), Liskeard	4	4 1/2	...
1024	Berlins (copper), Liskeard	2 1/2	4 1/2	5
1024	Bodmin Consols (lead), Wadebridge	4	4	...
5000	Bodmin Moor Consols (tin and copper)	1	4 1/2	...
—	Bodmin Wheal Mary (tin)	1	6 1/2	...
400	Butterton (lead), Menheniot	1 1/2	8 9	...
1000	Callington (lead and copper), Callington	2 1/2	10 1/2	7
4000	Calstock United (copper)	5	5	5
1184	Caradon Great Cons. (cop.), Liskeard	7	3	...
1536	Caradon Vale (copper and lead), St. Ives	1 1/2	1 1/2	...
3000	Garthwaite Consols (cop. & lead), Wadebridge	4	7	...
600	Combina (lead), Callington	8	15	...
1000	Combe Valley Quarry (lead), St. Ginnis	5	2	...
211	Craddock Moor (copper), St. Cleer	2 1/2	7	...
2560	Drake Walls (tin and copper), Calstock	6 1/2	2	3
—	Duke of Cornwall	3	3	...
1024	East Polgoth (tin)	6	7 1/2	...
1024	East Sharp Tor (copper)	5	8	...
1000	East Trescott (tin), Lanivet, near Bodmin	1	2	...
256	East Wheal Rashleigh, Lanreath	—	10	...
494	Gowen Consols (copper), Twardreath	45	30	...
256	Gowen Consols (copper), St. Cleer	45	15	...
2000	Great Beam (tin)	5	7	...
1024	Great Sheba Consols (tin and copper)	2	13	...
3072	Great Wheal Mitchell Cons. (cop.), Lanivet	3	5	...
512	Gr. Wh. Rough Tor Cons. (cop.), Camelford	29	20	...
6000	Grova Sila Company, Camelford	5	5	...
1024	Hawkmoor (cop.), Calstock, Gunnis Lake	5	17	...
6000	Heligston Down Cons. (copper), Calstock	2 1/2	4	...
512	Herodsfoot (lead), near Liskeard	27	12 13	12 12 1/2
1000	Holmbush (lead and copper), Callington	24	21 1/2	22
6000	Marke Valley (copper), Caradon	10	3 1/2	...
128	Motha (lead), Newlyn	34	—	—
256	Mineral Court (tin), near St. Austell	29	50	...
1024	Modithon & Marrabro' (copper & lead)	1 1/2	2 1/2	...
256	North Fowey Consols	—	25	...
1024	Okol Tor (lead)	1 1/2	4 1/2	...
128	Par Consols (copper), St. Blazey	5 1/2	650	...
406	Penhanger	1	6	...
2048	Pentire Glaze (silver-lead), St. Minver	5	8	...
5000	Roche Rock (tin), Roche, near St. Austell	1	—	—
1024	Roche Mines (tin), Roche, near St. Austell	5	—	—
256	South Caradon (copper), St. Cleer	5	100 122 1/2	122 1/2 125
256	South Trelawny (lead), near Liskeard	31	6	7 1/2
256	South Wheal Josiah (copper), Calstock	2	4	...
999	St. Minver Consols (silver-lead)	1	6	...
128	Takenbury (copper), St. Ives, Liskeard	8 1/2	8	...
2048	Treboll Consols (tin and copper), Lanivet	1 1/2	1 1/2	...
512	Treburt United (lead), St. Teath	1	—	—
6000	Tregerdock	1	5	...
6000	Tregerdock Consols (antimony & silver-lead)	1	—	—
256	Tregerdock (lead), Wadebridge	10	9 10	7
256	Trehaue (silver-lead), Menheniot	1 1/2	15	15
512	Trethay (copper), St. Cleer	7	5	...
512	Treville (lead), Lanivet	1 1/2	6 7	...
5000	Warleggan Consols (copper)	—	—	—
256	West Caradon (copper), Liskeard	20	105	107 1/2
512	West Fowey Cons. (tin & cop.), St. Blazey	40	60	...
1024	West Par Consols (copper), St. Blazey	10	11	...
2500	West Polgoth (tin), St. Ewe & St. Mewan	5	3	...
300	Wheal Arthur (lead), near East Wh. Rose	17	45	...
128	Wheal Arthur (copper), Calstock	13	—	—
1024	Wheal Bray (copper), Altermun	1 1/2	—	—
2324	Wheal Calstock (copper), Calstock	9	9	...
1000	Wheal Grose (silver-lead, copper, &c.)	1	—	—
1000	Wheal an-Gro (tin), St. Columb Major	5	5 6	...
256	Wheal Kingston (copper and silver-lead)	1	—	—
6000	Wheal Langford (copper and silver-lead)	1 1/2	2 1/2	...
1024	Wheal May (silver-lead and copper)	1 1/2	—	—
512	Wheal Mary Ann (lead), Menheniot	5	66 67 70	64 65 67 1/2
3000	Wheal Penhale (lead and copper)	2 1/2	—	—
128	Wheal Pollard (copper), St. Cleer	15 1/2	—	—
1056	Wheal Sarah (silver-lead), St. Kew	5	—	—
512	Wheal Sophia (silver-lead), Lantivet	7	7	...
512	Wheal Spry (copper and lead), St. Columb	8	8	...
1100	Wheal Trescott (tin), Lanivet, Bodmin	8	8	...
586	Wheal Trelawny (silver-lead), Liskeard	11	50 51 52	53 55
256	Wheal Tremaine (copper), St. Ervan	3 1/2	—	—
1024	Wheal Venton (silver-lead), Liskeard	3 1/2	9 1/2	9 1/2
910	Wheal Vincent (tin), Altermun	7 1/2	—	—
128	Wheal Violet (tin and cop.), St. Stephens	8	5 1/2	6 7
184	Wheal Vyryan (cop. & tin), Constantine	60	60	...

ST. AGNES, NEWLYN, AND PERRANZABULOE.

Shares.	ST. AGNES, NEWLYN, AND PERRANZABULOE.	Paid.	Last Price.	Transactions.
107	Budnick Consols (tin), Perranzabuloe	5 1/2	10 1 1/2	...
128	East Twynhayle (copper), St. Agnes	5	8	...
512	East Wheal Leisure (copper)	8	21	...
128	East Wheal Rose (silver-lead), Newlyn	50	650	575
262	North Wheal Leisure, Perranzabuloe	1 1/2	1 1/2	...
1160	Perran St. George (copper and tin)	2 1/2	45	...
1000	Polbrieg (tin), St. Agnes	15	—	—
256	Garra (lead), near Truro	43	23	...
300	Tywarnhayle (cop.), Illogan & St. Agnes	60	47 1/2	44
3000	West Shepherd (silver-lead and copper)	2 1/2	3	...
2048	Wheal Rose (lead), Newlyn	2 1/2	3	...
100	Wheal Friendly (tin), St. Agnes	70	65	...
4000	Wheal Golden (lead), Perranzabuloe	2	5 6	...
216	Wheal Henry (copper), Kew, near Truro	25	8 12	...
128	Wheal View, Perranzabuloe	3	5	...

GWENNAP DISTRICT.

Shares.	GWENNAP DISTRICT.	Paid.	Last Price.	Transactions.
1056	Carannall (copper), Gwennap	2 1/2	8	...
1000	Confort (copper), Gwennap	65	70	69
96	Great Consols (copper), Gwennap	1000	250	...
256	Lanarth Consols (copper), Gwennap	10	10	11
96	Treavean (copper), Gwennap	10	225	230
120	Trothellian (copper), Gwennap	5	18	...
120	Troviskey and Barriar (copper)	130	266	260 275
200	United Mines (copper), Gwennap	300	110	...
120	West Trelawny (copper), Gwennap	15	30	...
3725	West Wheal Favel (copper and copper)	12	2	...
512	Wheal Trevellick (copper), Gwennap	6 1/2	19 20	19 1/2 20 1/2

REDRUTH DISTRICT.

Shares.	REDRUTH DISTRICT.	Paid.	Last Price.	Transactions.
1024	East Buller (copper), near Redruth	2	6 1/2	7 1/2
128	East Carn Brea (copper), Redruth	4	—	—
256	East Selen and Wheal Maude, Redruth	4	4 1/2	...
256	East Tolgus (copper), Redruth	4	20 1/2	19 20 21
256	Grambler and St. Aubyn (copper)	80	45 50	50 51
1024	North Buller (copper), Redruth	4	14 15	...
1900	North Wh. Buller, or St. South Tolgus	5	7	...
256	North Trevellick (tin and copper), Redruth	1	2 3	...

Shares.	REDBRITH DISTRICT.	Paid.	Last Price.	Transactions.
256	North Tolgus (copper), Redruth	7	30	30
256	South Tolgus (copper), Redruth	16	155	157 1/2
5000	Treloigh Consols (copper), Redruth	6	3 3/4	3 1/2
128	West Buller (copper), Redruth	10	750	800
500	Wheal Daniel (copper), Chacewater	10	10	
182	Wheal Elizabeth (copper), Redruth	19	82 1/2	
990	Wheal Mary (copper), Redruth	14 1/2	7 1/2	
128	Wheal Plenty (copper), Redruth	19	38 39	
126	Wheal Union (copper), Redruth	40	45 50	
512	Wheal Selena (copper), Redruth	1	1 1/2	
1024	Wheal Uby (tin and copper)	2	5 1/2	
ILLOGAN DISTRICT.				
1000	Carn Brea (copper and tin), Illogan	15	115	
2560	Cook's Kitchen (copper and tin), Illogan	15 1/2	9 10	10
128	East Pool (tin and copper), Pool, Illogan	24 1/2	155	
94	East Wheal Crofty (copper), Illogan	125	150	
256	East Wheal Frances (copper), Illogan	2 1/2	4 1/2	4 1/2 4 1/2
6000	North Wheal Bassett (copper and tin)	—	25	
100	North Pool (copper and tin), Pool	45	420	
1000	Polgarres (copper and tin)	1	4 1/2	
2000	South Carn Brea (copper), Illogan	10	—	—
1100	South Dolcoath (copper), Illogan	6	—	6
256	South Wheal Bassett (copper), Illogan	10 1/2	330	340 345
124	South Wheal Frances (copper), Illogan	7 1/2	650	
6000	Tincroft (copper and tin), near Pool	7	11 11 1/2 12	11 1/2 11 1/2
940	West Tolgus (copper), Illogan	13 1/2	7 1/2	6 1/2
512	West Wheal Frances (copper), Illogan	7	20 21	25
500	West Wheal Towan (copper), Illogan	15	12 1/2	
1000	Wheal Agar (copper), Illogan	6	5 1/2	
CAMBORNE DISTRICT.				
1000	Camborne Consols (copper), Camborne	7	7 1/2	
256	Condurow (copper and tin), Camborne	20	116	114
1000	Copper Bottom (copper), Crowan	10 1/2	4	
256	Cranth and Bejawa (copper), Camborne	8	21	23 26
180	Dolcoath (copper and tin), Camborne	252	18 20	
1026	Gustavus Mines (copper), Camborne	5 1/2	6 1/2	
320	Nansagellan (tin and copper), Camborne	1	3	
140	North Hosker (copper), Camborne	10	160	
1026	Pendarves Consols (copper), Camborne	3	6 1/2	
1000	Pendarves and St. Aubyn (copper)	5	6 1/2	
1000	Stray Park and Camborne Vein (copper)	15	20 22 1/2	21 1/2 22
1200	Tolcarne (tin and copper), Camborne	4	5	
300	West Seton (copper), Camborne	65	170	
2560	Wheal Harriet (copper), Camborne	1	4 1/2	2 1/2 2 1/2
198	Wheal Seton (tin and copper), Camborne	107	240	
267	Wheal Tryphema (tin and copper)	40	40	
WEST CORNWALL DISTRICT.				
5120	Alfred Consols (copper), Hayle	3	17 1/2 18	15 1/2 16 1/2
1024	Bailswidden (tin), St. Just	9	10 1/2	
940	Balnoon Consols (tin), Uny Lelant	—	4 1/2	
40	Balovall and Napean (tin), St. Just	—	15	
128	Boscan (tin), St. Just	10	20	
60	Bosorn (tin), St. Just	5	6	
100	Bottalack (tin and copper), St. Just	182	150	
1000	Carbona (tin and copper), Crowan	5	10	
1024	East Bailswidden (tin), Sancered	1 1/2	2	2
256	East Godolphin (copper), Crowan	13 1/2	13	
1024	East Wheal Reeth	1 1/2	1 1/2	1 1/2
1024	East Wheal Margaret (tin and copper)	1 1/2	—	1 1/2 1 1/2
2500	Georgia Consols (tin), St. Ives	2 1/2	7 1/2	
1024	Great Wheal Alfred, St. Erth and Phillack	2	2	7
512	Great Wheal Barnard (tin and silver-lead)	20	82 100	
1024	Heleward (tin and copper), Uny Lelant	7	6 7	
256	Lelant Consols (tin), Uny Lelant	53	21 25	
160	Levant (copper and tin), St. Just	—	180	
1000	Lewis (tin and copper), St. Erth	17	18 1/2	
1024	Mill Pool (tin and copper), St. Hilary	1	8	8
2000	North Levant (tin and copper), St. Just	5	3	
512	North Wheal Vor (tin), Breage, Helston	—	5	
1024	Penance Consols (tin), Sancered	1 1/2	3	2 1/2
1024	Praed Consols, Towendack	1	1	1
350	Providence Mines (tin), Uny Lelant	20 1/2	30	
1024	South Levant (copper and tin), Uny Lelant	30	30	
128	Spearne Consols (tin), St. Just	20	75	
94	St. Aubyn and Grylls (copper and tin)	2 1/2	5 1/2	5 1/2
1024	St. Ives Consols (tin), St. Ives	80	80	
240	Spearne Moor (copper), St. Just	30	40	
1024	Trannack and Bosence, St. Erth	1	11	9 1/2 10 1/2
1024	Trannack United Mines (tin and copper)	1 1/2	4 1/2	
600	Trilcon Consols (tin), St. Ives	3 1/2	6 1/2	6 1/2
1000	Trumpet Consols (tin), near Helston	55	80 90	
1024	Wellingford (copper and tin), Perranithnoe	6 1/2	16 1/2 17	15 15 1/2 16
1024	Wheal Seaton (tin and copper), St. Hilary	5	12 1/2	
512	West Ding-dong (tin), St. Erth	10	65	2
1024	West Providence (tin), St. Erth	10	65	63 65
1024	West Wheal Treasury (copper), Gwinear	8	7 1/2 7 1/2 8	
1024	West Wheal Virgin (tin), Sancered	1	2	2
256	Wheal Albert (copper)	10	28 29	
1024	Wheal Augusta (tin), St. Just	1 1/2	3	
1024	Wheal Bai (tin), St. Just	10	14	
1024	Wheal Conterney (copper)	20	23	
128	Wheal Ennis (lead), St. Erne	12	20	
1024	Wheal Ennis (tin and copper), St. Hilary	1	20	
112	Wheal Margaret (tin), Uny Lelant	79	165	
1024	Wheal Neptune (copper), Perranithnoe	1	2	
1000	Wheal Oak, near Helston	1	1 1/2	
120	Wheal Reeth (tin), Uny Lelant	41	170	
256	Wheal Squire (copper), St. Erth	5	5	5
1000	Wheal Susan, Breage and Crowan	1	2 1/2	
1024	Wheal Tremayne (tin and cop.), Gwinear	5 1/2	21 1/2 22	20 1/2 21
1024	Wheal Treusback, Stythians	5	5 1/2	
210	Wheal Prospect	4	7	
WALES.				
248	Allt-y-Crib (silver-lead), Talybont	5	10	
000	Bishopston (silver-lead), Glamorganshire	2 1/2	10	
000	Blaenavon (iron)	50	12 1/2	
000	British Iron, New, ragia. (iron)	12	8	
—	Ditto ditto, scrip	10	10	
000	Bronfyoede (lead)	—	4	
000	Bryn-Arian (lead), Cardiganshire	2	2 1/2 2 1/2	
000	Bryntal, Llandiloas, Montgomeryshire	2 1/2	11 1/2	9 1/2
000	Bwlch Consols (silver-lead), Cardiganshire	4	4 1/2	
000	Cae-Gysyllt (silver-lead), Cardiganshire	4	4	
000	Cameron's Mainam Cons. (coal), Swanes	10	2 1/2	
000	Cefn Bruno (lead), Cardiganshire	6	50	55
000	Court Grange (silver-lead), Cardiganshire	10	12	
000	Craig-y-Mwyn (lead), Llanarthidr, Mont.	8 1/2	12	10 1/2
000	Cwm Daren	1	3	
000	Cwm Erth (lead), Cardiganshire	6	6 1/2	
000	Cwm Sefton	—	4	
28	Cwmystwith (lead), Cardiganshire	60	105	
000	Daren (silver-lead), Cardiganshire	2	8 1/2 9	
000	Dyffrynwm (lead), Cardiganshire	10	60	
150	East Daren (lead), Cardiganshire	17	60	65
000	Esgair Lleu Llandhelog-y-Croethin	4 1/2	5 1/2	
024	Freidd Llwydd Mines (lead)	1 1/2	3 1/2	
000	Gelli-rol-rin (silver-lead), Cardiganshire	1	5	
000	Goginan (lead), Cardiganshire	40	200	
000	Lisborne (lead), Cardiganshire	75	700	
000	Llwynmales (lead), Cardiganshire	9 1/2	8 9	
000	Llynvi Iron (iron)	50	80	
000	Merilyn (lead), Flint	2 1/2	5 1/2	4 1/2 5
000	Montgomery (lead and copper)	5	11 1/2	
000	Nantcon (lead), Cardiganshire	34	3	
000	Nant-y-Car (copper), near Rhayader	—	5 1/2	
034	Pennant and Craigwen (lead)	3	3	
000	Pen-y-bank and Erglodd (lead)	4	6 1/2	
000	Rhoswydell and Bachelodd (lead)	10 1/2	—	
000	Rhymney Iron (iron), Rhymney	50	12	
000	Ditto New	7	3	
000	South Wales Mining Company (lead)	1	1	
000	Tyn-y-Worgold (slate), near Carnarvon	4	4 1/2	
000	Tylwyth (lead), Cardiganshire	2	2 1/2	
48	West Goginan (silver-lead), Cardiganshire	1 1/2	1 1/2	
20	West Nantymwyn	2	2	
IRELAND.				
000	Dhurro (copper)	2	5	
000	General Mining Co. for Ireland (copper)	1 1/2	5 1/2	
000	Hibernian (copper)	12 1/2	1 1/2	
000	Mining Co. of Ireland (copper, &c.)	7	4 1/2	4 1/2
000	Wicklow (copper), Wicklow	5	18	
000	Wicklow (copper and sulphur), Wicklow	3	3 1/2 3 1/2	
SCOTLAND.				
000	Black Craig (lead), Kirkcudbrightshire	5	5	
87	Kirkcudbrightshire (lead), Kirkcud.	8 1/2	5 1/2	
MISCELLANEOUS.				
000	Derwent (silver-lead), Durham	10	3	
000	Keawick (lead), Fortinacale, near Keawick	11	2 3	
000	Low's Patent Copper Company	7	7	
000	Mendip Hills (lead), near Bristol	3 1/2	2 1/2	1 1/2
12	Old Brimpts (tin)	1	12 1/2	
000	Trenault (lime quarries)	2 1/2	3 1/2	
24	Weston (lead), Cheshire, Shropshire	1 1/2	1 1/2	
FOREIGN MINES.				
000	Altan Mining Company (copper), Norway	14 1/2	3	
000	Annotto Bay Mining Association, Jamaica	1	5	
000	Australian (copper), South Australia	5	1 1/2	2 1/2
000	Barrois Range (copper), South Australia	1	5	
000	Brazilian (gold), Brazil	23	5 1/2	
000	Cobre Copper Company (copper), Brazil	40	35 1/2	
000	Coplopo Mining Company (copper), Chili	14	4 1/2 4 1/2	
000	General Mining Association (iron & coal), Nova Scotia	20	14	
000	Kinzigtal Mining Association (silver), Germany	2	2	
000	Linares (lead), Spain	7	3	2 1/2 3
000	Dito New	3	3	
000	Mexican and South American (silver), Mexico	8	1 1/2	
000	National Brazilian (gold), Brazil	30	2	
000	North British Australian (copper), S. A. & New Zea.	1	1 1/2	
000	Royal Santiago (copper), Brazil	10	7 1/2	
000	St. John del Rey (gold), Brazil	15	14 1/2	
74	United Mexican (silver), Mexico	Av. 28 1/2	5 1/2	
000	Worthing (copper), Adelaide, South Australia	2	2	